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FORTY-FOURTH ANNUAL REPORT

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION

OF THE

STATE OF MICHIGAN,

WITH

ACCOMPANYING DOCUMENTS,

FOR

THE YEAR 1880.

BY AUTHORITY.

LANSING:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1881.

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FOR 1880.

ANNUAL REPORT.

THE SCHOOL SYSTEM.

It is not yet forty-five years since the first report of a Superintendent of Public Instruction was presented to the legislature of this State. But at this decennial period when the national census turns public attention with renewed interest to the progress and growth of all our civil and industrial institutions, I have thought it fitting to gather together the statistics of past years in our educational field, and to note, somewhat at length in another part of this report, the annals of public education in Michigan. In connection with this, I have been led more carefully than ever before to read the earlier records and reports of this office, and to study, more in detail, the times and circumstances that helped to shape and strengthen the system during the years of its growth. For the work of the men who have stood at the head of our schools in other days we cannot cherish too sincere respect and admiration. The more critical our examination of their work, the more hearty and enthusiastic must be our regard for their character and intelligence.

The foundations of free public education in Michigan have been laid broad and deep, and it mainly remains for us, in this day and generation, to see that the superstructure in massive strength and graceful proportion corresponds and comports with the dignity and scope of that upon which it stands. To properly appreciate what has already been done, we must consider the time and the circumstances in which the pioneers of our commonwealth labored to found the fabric of our school system. Few of the things which we at this day consider settled principles and established facts were more than problems then. The very principle of free schools was in debate and in the balance of uncertainty. The reports of the earlier superintendents were largely occupied with discussions of what we consider the simplest fundamental truths, and long after the State had a being the uncertain and problematical in education far exceeded the fixed and unquestioned. In the light of these facts, it is wonderful to note the high aim and lofty ideal of the fathers. There is hardly a thing that we consider to-day characteristic of our school system but was boldly planned or prophetically outlined by the first Superintendent of Michigan in his reports to the legislature of this State,—and that, too, at a time when there was not, in all the country, a State university, a State teachers' association, a normal school or anything like organic and developed system in school work and educational appliances. Horace Mann was just about taking his place at the head of the Massachusetts public schools and was yet to signalize his life by the wonderful agitation which he there began and which has been

going on from that day to this. John A. Dix was Superintendent of Public Instruction in New York, and had brought to his duties the great energy and executive ability for which his career was renowned. The equal of either in the clear foresight with which he surveyed the field and in the profound impression which he left upon the schools was Michigan's first Superintendent, John D. Pierce. In his first report he holds that the public school must, of necessity, be a free school; that it must cover the whole field of education; the necessity of wise local supervision is emphasised; the public school library is shown to be indispensable; the professional training of teachers in special normal schools is declared of highest importance; the sacredness and importance of the public school funds is zealously maintained; the broad and liberal character of a true State university is glowingly portrayed, and the path clearly forecast in which that institution is yet working out its destiny. This was the first hearty impulse that by its very earnestness and faith in the future more than half accomplished its aims. The real work to be wrought out under the inspiration of this high ideal was yet to come, and during the many years, from that day to this, have been gradually laid the foundations of our system of free public schools. We are just passing out of this period, and upon us rest other labors and responsibilities, made lighter, indeed, but at the same time more important, by the grandeur of the work of those who have gone before.

The work of the past has been largely constructive in its character. It has settled many questions that for years vexed the minds of the friends of the schools. It has adjusted differences, balanced conflicting claims, fixed the course of our progress in definite lines, and provided a means of meeting nearly every demand that a people can have upon the commonwealth in the way of free and liberal education. If we will note for a moment we shall see how comprehensive are the foundations already laid, and how generously they are adapted to meet all the needs of the State if we build as wisely as others have planned.

The Work of the Past.

The University of Michigan historically comes first in any survey of the foundations of our educational edifice. It was the first educational thought of the State. In territorial days, as early as 1817, there was struck out the glowing ideal of the "Catholepistemiad, or University of Michigania." This quaint conception of an early day with its didactors and didaxia is noticeable only in so far as it indicates a definite purpose in the minds of that age to care for higher education. Nothing ever came of the scheme; but the skill with which the territorial statesman selected and preserved the landed endowments of the University shows that there was practical wisdom in those days as well as sounding phrases. The University has always been a vital part of the public school system. As outlined by the early legislators, it embraced within its purview the whole field of higher and special education. At the central institution were to be the college of literature, science, and the arts, the college of medicine and the college of law. In the branches were to be the gymnasia or high schools of the State, the normal schools for the training of teachers, and the schools of agriculture for the technical education of farmers. The scope of the University proper has been somewhat narrowed but higher education has been advanced thereby. It was among the charges committed to the care of the State Superintendent by the first educational legislation of the State, and ever since it has been enumerated side by side with the primary and graded schools as constituting with them the Michigan school system. Only

once, in 1842, did the University authorities ever suggest a sundering of this intimate connection. Fortunately for the University, the legislature refused to separate the interests of primary and higher education, and the wisdom of this decision has become more and more apparent with the progress of the University in its connection with the public schools. The University and higher education were thus finally and fully determined to be essential parts of the free school system of Michigan.

The relation of the University and of the State to private collegiate enterprises was for many years a mooted question. There were unfounded fears on one side and unfounded jealousies on the other, and this unfriendly strife, natural as it was, caused some bitterness of feeling. But this is all a matter of the past, and one reads now with curiosity and amusement the warm words that occasionally marked the discussion of this subject. The colleges may well be recognized as generous helps to higher culture in the State that have won their way to recognition, and are well worthy the filial devotion of their sons and daughters. In words worthy the man and the subject, Supt. Gregory, in his report for 1863, thus closes probably the last serious discussion of this subject: "It is but just to the colleges of Michigan to state, in this connection, that while often embarrassed for want of adequate endowments, they represent, through the generous and self sacrificing spirit of their faculties, a much larger capital than their financial statements exhibit. These Christian teachers not only give their services for salaries of half the ordinary amount paid in wealthier institutions, but they often do double the ordinary work, and thus make the stinted incomes of the institutions they serve, like the loaves and fishes in the great miracle of Christ, to become the abundant food of hungering thousands." We may then regard as settled for all the future that the University will be generously and nobly aided in the field of liberal scholarship by the private colleges, and that the only strife between them will be as to who can best work and best agree.

The broadening of the University has been a matter of slower attainment. From time to time the schools and professorships of special sciences have been added until now with its departments of law and medicine, its schools of dentistry and pharmacy, its observatory and chemical laboratory, its hospitals and museums and libraries, its liberal courses in engineering and history, in literature and the science of education, there is hardly a department of higher culture that is not liberally provided for in the University of Michigan.

The relation of the University to secondary education has been varying. In the first scheme it was planned to have, in each county, an academy supported partly by the university endowment and partly by local appropriations and tuition fees. These were to be branches of the University and were to correspond to the gymnasia of the Prussian system which was at that time attracting so much attention, not only in this country, but also in France and other continental states. The plan worked with waning success for a few years but did not survive the opening of the University at Ann Arbor, where it was wisely thought best to concentrate all the resources of the young institution. For a long time thereafter the thought of a vital connection between the University and secondary schools seemed to be lost; but, within recent years, the principle of the organic unity of our entire system of higher education has peen emphasised, and the propriety and necessity of such a relation in some effective form is admitted with practical unanimity throughout the State.

The higher education of women and the means by which the State shall provide for this are no longer matters of controversy. The questions of a female

college or female department in the University were very early discussed, and the co-education of the sexes was looked upon by many as a dangerous experiment, but the change finally came so noiselessly and so harmlessly that it put to shame all the fears of former years. The discussions of this question, the wide range they took, and the warmth of feeling that attended them, read with peculiar interest in the light of to-day.

And so we see strongly intrenched in the affections of the people the noble institution which has shed such a lustre on the name of Michigan. Its relation to the public school system is established; its unquestioning fidelity to the needs of the people is a matter of history; its endowment has been religiously preserved and liberally supplemented by an appreciative commonwealth; it has risen superior to all antipathies and rivalries, and stands in cordial fellowship with all kindred attempts for higher education in the State; it has grown and broadened in its plans until it covers the whole field of liberal education and special culture; it finds in the high schools of our cities and villages the outgrowth of the old university branches, and thus realizes its early ideal by seeking an intimate connection with them; it has solved more satisfactorily than any other American university the question of the education of woman; and upon these foundations it is building its future.

The University plan originally, as before remarked, contemplated a school of agriculture to be located in one of the branches. When the branches were discontinued the idea of a school of farming was kept alive, and various plans were proposed and urged with great earnestness and feeling. The wise solution was not reached without grave misgivings, and these for some time attended the earlier years of the Agricultural College and weakened the heartiness of its support. Against all these the school has won its way, and the people of Michigan builded better than they knew in founding the first Agricultural College in America.

In the matter of the professional training of teachers the State has a firmly established policy. It was not matured without experiment, and is yet to reach its full development, but the foundations are secure. It was a part of the work of the University branches in the original plan to instruct in the art of teaching, and one of three plainly marked courses of study was to be devoted to that end. With the modification of that plan there has been gradually matured a system of professional training embracing the State Normal School and State and county institutes under the care of the State Superintendent, and training schools maintained by the local boards in our larger cities. When the Normal School was established the union and high-school system of the State was not yet developed, and the school was obliged to do other than strictly professional work, but the State Board of Education always regarded this as only a temporary necessity, and in his first report, over twenty years ago, Superintendent Gregory expressed the hope that the Normal School might soon throw the most of its academic work upon the union schools and devote itself to its proper work of professional training. That end has been practically accomplished and the professional school for teachers has entered upon its true sphere of usefulness. The school thus presents courses of special training for the several grades of work in the public schools, and, free from all embarrassments, gives its whole energies to the work for which it was founded. Until some four years ago teachers' institutes were considered an expensive luxury, too good for ordinary occasions. They were passed around as a scarce commodity, and had been held in a sort of desultory way, upon no regular system, for the twenty years preceding at the rate of about *ten* each year. The

institute law of 1877 inaugurated a definite system, embracing an institute each year in every county of the State, and a State institute for the conductors and instructors in these local institutes. The result has been to bring to the service of the State a well-trained corps of instructors, who have carried the best methods of teaching and discipline to the teachers of the primary schools, and so have done much to awaken public sentiment to the need of improvement in our rural districts. Training classes in connection with the larger city systems of schools have within recent years become an established feature of their work. These, though voluntary in their character and independent of State control, are established with a care and system that must insure permanent and increasing results, the value of which will extend beyond the city and be felt in the schools of a large number of localities in the State.

The establishment of a practicable scheme of secondary education in the State was the work of more than a score of years. We can with difficulty realize that the union school and the high school were not ingrafted into the Michigan system of education until ten years after the State had an existence. At first the branches of the University were to do the work of the secondary school. After them there sprang into existence a large number of private seminaries. Then came the proposition to place these on a firm basis and make them auxiliary to the public schools by means of annual appropriations from a State fund. As late as 1854 the propriety of returning to the branch system was seriously proposed. In 1856 Chancellor Tappan regarded as the point of immediate interest at that time the adequate endowment of the union school or academy for the purpose of filling a vacant place in our school system. In 1859 Superintendent Gregory regarded the success of this class of public schools as assured, notwithstanding the fears of "some alarmists who do not cease to predict their overthrow." To-day the graded schools are educating nearly one-half of the school population of Michigan, and furnish secondary education of a more or less extended character to about 400 communities. They have grown, not as the result of any legislation or endowment funds, but as the development of the primary school; and thus the original ideal of the complete system of education, with three great divisions of primary, secondary and university grade, has been realized far more satisfactorily than it could have been in any other way.

Outside these graded systems of schools are the primary schools proper. They have been called the ungraded schools, and unfortunately the term is no misnomer. They present a most interesting field for our consideration. If we regard them from the standpoint of our ideals, we may easily despair; but if we regard their future in the light of the past, if we consider for a moment the points of vantage already gained, the foundation principles that have been settled, never to be shaken, we may well contemplate the future as full of hope and promise. Michigan was among the very last states to make her public schools free schools for all the people, and the State that abolished the rate-bill less than fifteen years ago cannot be expected to have perfect rural schools. The primary schools are now entirely free, and the school interest fund increased, as it undoubtedly will be, by the proceeds of the specific taxes, will yield the districts over a dollar per child. This, supplemented by the mill-tax and local taxation, makes the question of support an easy one. The sentiments of local independence and local responsibility are especially strong in regard to the administration of school affairs. The principle of local supervision may be considered established, though some of the attempts to secure that object have been so unfortunate and discouraging. Generous provision

has also been made for libraries, which only need proper management to become a source of incalculable good to our rural communities. The annual county institute, designed for the especial benefit of the primary schools, is a fixed fact in our school economy. Thus much has been accomplished in the past, and these are the elements from which to work out the problem in the primary schools. If that work is undertaken with an honest enthusiasm, success will be easy, and the only difficult thing will be to fail. The foundations are stable, and the superstructure, we cannot doubt, will be equally broad and complete.

The charitable and reformatory institutions, which are educational in their character, have been planned upon a liberal scale. There are already provided the Reform School for Boys, the Reform School for Girls, the State Public School for Dependent Children, the Institution for the Deaf and Dumb, and the State School for the Blind. With the exception of an institution for the education of the feeble minded, the State has generously furnished training for every class of dependents which may reasonably look to the public for especial care and protection.

So much for the work and achievement of the past. It is with reasonable pride that we can point back to the symmetrical upbuilding of a great University, adjusted to all our wants and conditions, in sympathy with all aspirations for higher culture and training, loyal to the public schools, seeking to elevate their standard, and affording to every boy and girl in the State the means for the highest general and special culture; to a State Normal School, devoted entirely to professional work, and an institute system carrying a normal school every year to five thousand common school teachers and into every county in the State; to *four hundred* graded schools, giving high school advantages to over *two-fifths* of the school population of the State, and furnishing academic preparation for the Normal School and the University; to a system of free rural schools liberally endowed by the Government, and limited in their value and usefulness to the community only by the will of the community itself; and to a class of charitable institutions amply providing for the care and education of every unfortunate and dependent child in the State.

Problems of the Future.

The problems of the future lie in the management of the schools rather than in the establishment of principles. The work to be done is in the improvement of the schools, not by making other or different schools, but better schools. This work is going on in every department of the system. The University shares in the general advance. In the words of the first commencement orator in 1878, it is becoming "less the college and more truly the university." We see it in the movement looking to an abandonment of the strict class system, in the higher grade of preparation required for admission to the professional schools, in the eclectic system which is being widely extended, and in the working out of an organic connection with the secondary schools. These are all in process of development; the principles are conceded and the successful solution will come with time and experience. The work of the future in the Normal School is also mainly administrative. The proper adjustment of its academic and professional work, the wider use of training and practice teaching, the introduction of kindergarten methods, a definite relation with the grammar and high school courses of the union schools preparatory to its training classes,—these are some of the things which the school has on hand and which will be readily accomplished in the near future. The institute sys-

tem, thoroughly established in principle, has yet to receive its regular and complete development. The graded schools have probably received less systematic direction in the past than any other class. They have developed from the primary school naturally and in obedience to circumstances. It has been well for them that the University has given them a high standard of attainment. But while the high school has been stretching up toward the University, it has not always broadened to meet the wider needs of the home community. And has not the reverse as often been true? Has not the school as often been flat, heavy, and monotonous, lacking the inspiration of the high motive and healthy ambition which the preparatory work would have given it? The fully equipped high school does a double service. It is a local finishing school, and is also a part of the graded system of the State which begins in the primary school and ends in the University and professional school. The local wants of the majority of the pupils will always come first in importance and afterward the preparatory work necessary for admission to the Normal school and the University. The fair adjustment of these different demands, the cultivation of an *esprit de corps* by means of uniform reports and methods, the extension of the union school system to the rural communities, the establishment of teachers' classes and training schools, the abridgment of the work of the smaller union schools to a more practicable ten-year course,—such themes afford a field for thought, inquiry, and discussion that cannot but be profitable in good results.

All these questions are in the hands of active and zealous friends who are working together with the one aim of solving them in a way the best to promote the good of all the schools, and whose only rivalry is to see who may most jealously guard the honor and promote the unity of the Michigan system of liberal and higher education. But while this is true of the graded and high schools and the higher institutions, the primary schools of our rural districts are not so intimate a part of the system as to catch the general spirit of advance and growth that has pervaded the State. If there are weak points in the legislation affecting the graded schools and higher institutions, their intelligent communities and liberal and progressive faculties and governing boards have generally supplied the defects by wise and skillful management. So we may naturally look for signs of weakness and the results of inefficient management, or defective legislation, to show themselves more plainly in the smaller rural school. I have spoken of this phase of the school problem in the State in my two previous reports, and as I have reviewed the growth of the general system more at length nothing has impressed me so deeply as the need of a more intelligent management of the strictly primary schools. The principles which secure the benefits of free public education to every child in the remotest sections of the State are all firmly established. To the intelligence of the people and a right appreciation of the schools on their part we must look for genuine improvement.

In the management of the rural schools perhaps the most prevalent defect is the lack of experience and intelligent appreciation of their duties on the part of school officers. The position of school officer is not generally thought desirable and is passed around as an irksome task. The people are naturally watchful and critical of their public officers, and it is often easier to do nothing than to take responsibility and go ahead with vigorous and intelligent reforms. The officer who takes the responsibility honestly and intelligently, and carries out a policy of reform and improvement, seldom fails, ultimately, of his reward in a generous appreciation on the part of the public. Still the timid and cautious will always shrink from the undertaking. The criticism of one's next door

neighbor is always hardest to bear. The school business is, to an extent, every body's business, and that is too often nobody's business. The ordinary rural district, with its limited round of cares, affords too few imperative tasks to educate a school officer to an intelligent understanding of his duties.

The *necessary* yearly duties of a board of three able-bodied men, consist in hiring one or two teachers, buying a dozen cords of wood, setting a few panes of glass, putting on a hinge here and driving a nail there. The records of this important body, if kept at all, occupy a page or two of the record book; the board meetings consume two or three hours per year, and the whole time given to duties of office, generally on the part of the director alone, would not exceed three days in the three hundred and sixty-five. This is the minimum of official duty, and the minimum is the rule. A lifetime of such official service would not make a man an efficient school officer. The thousands of such school officers in this State are too remote from any responsibility to the State Superintendent to feel or care for criticism from him. The growling of a surly neighbor is far more important. There are no nearer supervising officials to give close oversight to their efforts, and so the school drifts along from year to year with the least possible care and direction.

But this minimum of work is no adequate performance of the legal duties a district officer. The law places upon the district board the general management of the school. The law prescribes that "they shall have general care of the school, and may establish all needful rules and regulations." The duty of prescribing a uniform list of text books is made imperative; but no less imperative is the duty of fixing a uniform and reasonable set of rules and regulations; of establishing a simple and continuous course of study; of establishing a system of grading and promotion that shall be uniform from year to year; of caring for libraries and reference books, for maps and blackboards.

The frequent change of teachers is often deplored and is indeed deplorable. Only 1,076 districts in the State did not change teachers during the past year, and most of these had only a three or four months' term of school. But the district board should give the school such a strong and definite character that the tenure of teachers would be more permanent, and that no change of teachers could affect the school. Teachers are charged with introducing new books and strange regulations, but nothing, save the indifference of school officers, could make such assumptions on the part of their employés possible. If the school officers will not do their duty, the teacher has some excuse and reason for assuming their functions. From all these causes we find the schools very generally without certain and continuous character. The people, grown indifferent to changes and to the characterless condition of their schools, rather enjoy the shaking up of things by a new teacher every three months. But nothing can be more pernicious. The old idea that "the teacher is the school," has no more place in an American free public school, than the imperial assumption, "*L'etat,c'est moi,*" in the American system of popular government. The teacher is temporary; the school is perpetual. If the public sentiment is what it ought to be, the teacher, though a very important element, must relatively be only a small part of the school. The true school is an organic, continuous, and perennial institution that exists from year to year, winter and summer, in term time and during vacation, alike. With a teacher or without, every one knows its relation to himself and his place in it. There is no reason why the small school should not have as clearly outlined and permanent a character as the largest school.

A school is in its crudest state of development when it can change its character with every season and at every change of teachers.

The defective management of local school affairs is also seen in the inadequate provision of the simplest necessaries for decent school keeping. In this connection the following figures are instructive. In 1,392 districts there is no register or record of pupils kept. In 5,312 there are no globes. In 4,717, no maps. Only about one-half the districts report a uniform list of text books. This, however, is a commendable increase upon last year. Only 752 districts report any attempt at a regular course and succession of studies. The library interests are as carelessly managed. Neither district nor township libraries are provided in a majority of cases, and every year thousands of dollars that lawfully belong to the library fund do not reach the hands of the district board, or are diverted to defraying the general school expenses. This plundering of the libraries has amounted in the course of the last forty-five years to hundreds of thousands of dollars. The books purchased are not carefully preserved. Some years have shown an actual decrease in the number of volumes in the face of large outlays of money.

All these matters of grading and promotion, of text books, courses of study, blackboards, maps, globes, reference books, record books, and libraries are within the proper and legitimate duties of the school officers of the district and township and of the teachers under their direction; and the remedies are not far to seek. Briefly stated, the great wants of our schools to-day are *better qualified* officers and teachers, and *fewer* school district officers.

Local Supervision.

It is perhaps impossible to make any immediate reduction in the number of district officers. It is therefore so much the more important that there begin at once an effort looking toward the systematic education of both the officers and teachers of our rural schools. It seems to me this can be done in no other way so effectively as by utilizing the township inspectors in the work in conjunction with some efficient county authority. I have no sympathy with the sentiment that would cry down the school officers of the townships. I am glad that the office of township school inspector is a constitutional office. Had it not been so it would have been abolished long ago. As it is, I see in it the germ of much good to the schools of the State. I think it was extremely unfortunate that the county superintendency law of 1867 took the work of school *visitation* entirely out of the hands of the township school inspectors. There were very many poor inspectors and the examinations were, in a majority of cases a farce, but there were also in some townships in every county in the State, acting as visiting inspectors, some of the best and most public spirited citizens, who were exercising an intelligent oversight over the schools and doing more than any county superintendent could possibly do in the work of visitation. Some of these men had given careful and conscientious labor to the schools continuously for ten or twenty years. Probably a fourth of the men legislated out of any connection with the schools by the law of 1867 were such as these, who could ill be spared. Such men should have been retained in active connection with school work. Their influence should have been concentrated by union in a county organization in connection with a proper examining officer or board, and the leaven of their zeal and fidelity would have leavened the whole State. The county system alone was tried for a number of years with little satisfaction. Then we returned to the township system. Can we not do better by com-

bining the two in an efficient and harmonious scheme which shall save all their strong points and avoid their weaknesses?

My views on this subject were expressed quite fully in my report for the year 1878. I shall be pardoned for repeating with little variation my recommendations embraced in that report.

The great need of the ungraded schools of the State is a more efficient system of local supervision. The Constitution provides for school officers for the district, the township, and the State. To make the system complete in its workings there should be added corresponding officers for each county. I think the great difficulty with our plans heretofore has been the idea that we must have a system of local supervision exclusively by a county officer, or as exclusively by a township officer. When the county superintendency was enacted the township inspectors were ignored as useless so far as the work of supervision was concerned. They could not be legislated out of existence, for the office is provided for in the Constitution; but they were as thoroughly ignored as possible. The county superintendent, also, very rarely had anything to do with the district officer while his relation to the State Superintendent was simply clerical. He did not become a part of the system, but touched it only on the outside and at a single point. When, therefore, I say that we need a county school officer, or a county board of school officers, I mean that such county officer, or officers, should become a part of the official school system. We have tried the county system by itself. We are now having some experience with the township system exclusively. Would it not be better to try to secure a system that would give the greatest efficiency to both these officers in their respective spheres of action? Do they not each possess elements of strength that are essential to the best supervision of the rural schools? Legislation should be constructive, not destructive; compacting, not isolating; developing, not distorting; utilizing existing forms, not multiplying and diffusing them. For the best working of the township system, a county unity of plan and purpose is needed. On the other hand the county system absolutely needs the coöperation and popular strength of an active township system, and the first object of the county system should be not to supplant but to strengthen that system. The county system is strong in its compactness and nearness to the State department. The township system is strong in its nearness to the people and the schools. Together they leave little to be desired in the way of good local supervision. The proper administration of the State department requires these two grades of officers in active harmony with each other. I am, in my work, constantly made aware of the lack of proper supervision and intelligence in the conduct of local school affairs. At one extreme of the system is the State Superintendent; at the other are 1,000 township superintendents, 6,000 district boards and 13,000 teachers. The distance is simply disheartening. The county officer is absolutely necessary as an intermediary, and a center of communication with the schools and among the schools. But the county officer without the active help of the township officer works at a great disadvantage. The true system of local supervision must include the district board, the township inspectors, the county officer, or officers, and the State department, inter-dependent, mutually responsible, and working with perfect harmony and respect.

Supervision is needed for several distinct purposes. 1st, *For the examination of teachers.* This is by far the most important work of the supervisory agency, and one that should be entrusted to none but experienced educators of thorough scholarship, sound judgment, and good common sense. When the necessary qualifications of a teacher are considered all will agree that the im-

portant work of examination should not be given into the hands of those with anything short of ripe culture in all that pertains to education, and free from any local and political prejudice. He should have a thorough, ready knowledge of the studies usually pursued in the common schools, with their underlying principles. To this should be added a natural aptness to teach, strengthened by careful training in the best methods of presenting the different subjects to pupils. He should also possess such natural qualities as shall make him successful in the discipline of a school. When to these qualifications is added a sound moral character that shall make him a safe model for his pupils in all matters of propriety of deportment in school and out, we have the minimum amount of qualifications that should be accepted from any applicant for the responsible position of teacher. No wonder that Horace Mann said: "It is no trivial arbitrament to decide whether a school shall be a blessing or a nuisance, and therefore the question of a teacher's fitness is not to be guessed at, but solemnly pondered."

This examination cannot be completed in a few minutes while the township superintendent is resting his team in the plowfield, but it should be a work of deliberation and care, with all possible help from a record of previous work of the applicant in the school-room.

This work of examining can be done best by some authority co-extensive with the county, and I think that authority should be a county board of three examiners. The most profitable work that was done by our best county superintendents was in the examination of teachers. That plan was weak, however, in placing all the responsibility of deciding such matters upon one man, and in obliging each new incumbent of the office to begin his work in ignorance as to the merits of different teachers, peculiarities of districts, etc.

The decisions of a county board, on the contrary, would command more respect than those of either one of its individual members, and, if chosen for a term of three years, only one-third of the board would be new to the work at any time. Being selected, too, from different parts of the county, as they naturally would be, they could assist each other in determining matters of local importance. The secretary of this board should be its executive officer, and would probably be a prominent teacher of the county.

The second work needed in the proper care of country school interests is the *county institute*. The institute law of 1877 makes wise provision for this work, but is weakened by not having ready at command an officer of intelligence, who understands the local needs and requirements of the schools, and who can thus assist in giving the work the proper direction. The secretary of the county board, constituted as we have suggested, would meet this want and be a resident conductor to act jointly with the representative of the State Superintendent in the management of the institute. The institute system could be readily adjusted to such a plan, and would be greatly strengthened thereby.

The third point necessary in a system of supervison is the *local teachers' meeting*. This should be held during term time, and attendance upon it should be compulsory. The township superintendent should have charge. I can easily believe that these meetings would grow to be of such importance in many localities that the people would insist on having a whole day given up to them each month. The State Department being associated with the county board in the institute, and the county board with the local authorities and the people in the township teachers' meeting, these meetings would furnish a valuable medium of disseminating correct educational principles, and of developing systematic reform in the State.

When we have competent examination of teachers, well conducted county institutes, and properly managed township teachers' meetings, the work of *visitation* becomes a matter of secondary importance, not to be neglected indeed, but of such a character that it may be safely entrusted to the care of the township superintendent. The visitation would then be for the purpose of reporting to the county officer the size of the school, its particular needs, and the grade of studies pursued; the apparent success of the teacher in discipline and instruction, in what respects the teacher is strong, and wherein weak. These reports should be made twice each term, soon after opening and near its close.

The county board might very properly be chosen by the township superintendents of the county, with whom they should meet for consultation at least twice a year. As a result of these meetings the quality of the township superintendent would be greatly improved.

I have thus briefly stated what appear to me to be the principles upon which a system of local supervision should be founded, and the leading features of its work in the order of their relative importance:—first, the examination of teachers; second, the county institute; third, township teachers' meeting; fourth, visitation, and incidentally have outlined a plan whereby these principles might be made practically operative. It is simply one way in which to obtain the supervisory work which is needed. It would, I believe, have many merits neither of the systems thus far in vogue in this State have possessed. It would be stronger in examination than the county superintendency system. It would round out into completeness the county institute. It would give us a county organization of township authorities, and a township teachers' meeting, which we have never had; and we should then have visitation of schools just when it is needed, and of such a character as to be of real permanent value.

The general features of this plan are not new in this State. There are hints of it all through the reports for the past forty years. The original plan, as outlined in his report by Superintendent Pierce, required the inspectors to visit each school at least twice a year. For some reason this provision was repealed within a few years, and Superintendent Sawyer, in his report for 1841 says:

"The reason of the repeal is unknown. It is thought that the omission of so essential a provision, one bearing with such direct force upon the interest of the common school, must have been an oversight in the Legislature. Yet, notwithstanding the law is silent, many conscientious inspectors have continued to visit the schools. And it is hoped that the moral obligation to do so will be more generally felt than it has been during the past year. While on this subject it is respectfully suggested whether that part of our system which imposes upon inspectors the duty of examining teachers, be not susceptible of improvement. * * * * * * * The suggestion that something of the kind, either a deputy superintendent or a county board of examiners, would conduce to the vigor of our own system is made with the conviction that the town board of inspectors, as at present constituted, cannot be expected to fulfill the purposes of their appointment."

Superintendent Mayhew, in his report for 1845, suggests laws providing for a county board of school inspectors, consisting of one inspector from each township, and also for a township board of school directors with the school inspector for chairman. He says:

"I am fully satisfied that the passage of such laws would tend to strengthen weak districts; that scores of districts which have lost their organization would reorganize within one year, and that, with a very few exceptions, every district

in the State would voluntarily sustain a school the constitutional term. At present there is very little community of feeling among inspectors of adjacent towns, or even among directors of adjacent districts. They may have a speaking acquaintance and meet as townsmen or citizens but not as school officers. The proposed arrangement would bring together the school inspectors of a county twice every year; once soon after their election to organize and eleot officers and again immediately after the termination of the school year to make out their annual report to this department. * * * * * * The inspectors would also have an opportunity of exchanging views with reference to the best method of improving the schools under their immediate supervision and of engaging in concert of action. * * * * * * With the proposed improvement in the school law, through the medium of county conventions of inspectors and town conventions of directors, the influence of the superintendent might be directly and sensibly felt by every parent and child in the remotest school districts of the seagirt peninsula."

In the reports from this department for 1846, 1847 and 1850, similar suggestions were made. In his report for 1860, Superintendent Gregory suggests a county superintendent to be elected by the township school inspectors. All these plans involve somewhat vaguely in one way or another the union and co-operation of the township and county officers in the varied work of supervision of the schools.

In no state is the county superintendency more popular and efficient than in the State of Indiana. There the county superintendent is chosen by a board consisting of one trustee from each township, and he meets these trustees in a county board meeting, required by law twice each year. These township trustees are generally intelligent officers who manage their schools and do a most important and effective share of the visitation. The uniform testimony is, that this co-operation of township and county officers in the management of the schools has vastly improved the character of the township officials and of their schools during the few years since the law went into effect. Certain it is, the schools of Indiana have made the most wonderful forward strides during the past ten years.

Hon. Birdsey Grant Northrop, Secretary of the Connecticut State Board of Education, discusses the questions of the *examination* of teachers and the *supervision* of schools quite at length in his report for the school year 1879–80. He says: "The present method of *examination* is the weakest point in our school system. Teachers are approbated only by the school officers of the townships in which they teach. Candidates rejected in one township may be certificated in the next. Hence many of our schools suffer from the incompetency of teachers. This evil arises not so much from the scarcity of good teachers, as from a vicious method of selection. The importance of this subject demands a thorough discussion.

"It has been my good fortune during the past twenty-five years to visit schools or confer with teachers and school superintendents in educational meetings held in all the northern states this side of the Mississippi river and in several other states. Anxious to learn as well as to teach, I have valued these opportunities of observing the comparative workings of different school systems. In the certification of teachers, most of all, we may profit by the experience of other states. The testimony of educational experts throughout the country is almost unanimous in favor of county and state boards of examiners.

"Several of the western states originally copied the Connecticut school system; but the old Connecticut method of certificating teachers has been abandoned in all but one of them [Michigan]. The State school superintendents of the western and middle states now regard state and county boards of examiners as an indispensable part of the system, as the right arm of power for the uplifting of their schools. It has done more than any one thing to vitalize their schools and promote their improvement. This method, founded in reason, has stood the test of a varied experience, and everywhere proved beneficial in practice."

With reference to the supervision of schools Mr. Northrop says: "I have never favored the plan adopted in many states of entrusting the *supervision* of schools to county superintendents. Among the reasons for this conclusion are the following:

"1. My observation and experience confirm the opinion that the work of supervising the schools in our country towns is better done by our acting visitors than it would be by county superintendents. Living in the same town, they know the scholars, their needs, plans, possibilities and prospects better than would a county superintendent. Their advice and suggestions are more likely to be adapted to the real wants of individual scholars and classes.

"2. They visit the schools much oftener than county superintendents usually do or can, and therefore become better acquainted with the teachers, often acting as their friend and confidential adviser, to whom they may freely state their difficulties, and from whom they may receive timely counsel and friendly criticism.

"3. In difficult cases of discipline the advice of a judicious school visitor, *near at hand*, is often of great service, forestalling serious trouble, and showing how much better prevention is than cure. At such times teachers need encouragement as well as advice. Isolated and unvisited by equals and superiors, perplexed if not discouraged by difficulties, a teacher needs and merits the cheering of words of sympathy and approval.

"4. School visitors can do more to awaken popular interest in behalf of education in each locality than could a county superintendent. The character of the schools in each town answers to local public opinion. You elevate public sentiment by improving the schools no more surely than you improve the schools by elevating public sentiment. They reciprocally influence each other. Popular ignorance, or indifference even, will cripple the best educational system, for a law in violation of public sentiment is a dead letter. Effective school laws must depend largely upon public sentiment."

While I agree with Mr. Northrop on the general principles he maintains, I am strongly of the opinion that the intimate connection of the county and township officers and their close responsibility to each other are of the highest importance. The county officer, whether county superintendent or secretary of the county board of examiners, must do some special visitation in any well ordered system. The more visiting he does, the more he needs the local help of an alert and faithful township officer. The township officer can also contribute materially to the value of a county examination of teachers. The needs of particular schools and townships, the weak points of teachers, and the actual quality of their success are things which the local officer only can ascertain and which the examiner must know. Therefore it seems to me that in the efficient system there must be a county board or officer for the main work of the examination, and a township officer for the principal part of the visita-

tion; but that the township officer must help in order to make the examination of the highest value to his township, and that the executive officer or secretary of the county board must be relied upon to devise plans for the uniform and systematic visitation and reporting of the schools by the township officer and to supplement the work of that officer in important and difficult cases.

With such a system in operation in this State, the most noticeable and immediate result will be the improvement in the character and efficiency of our school officers and teachers. The educational awakening that will be sure to follow will be permanent and profound. The popular demand in many counties will soon require that the secretary of the county board give his whole time to the general oversight of the schools, and the constant test of the value of such a county officer will be the amount of effective aid rendered to the work of the township visitor. The moment that local officer is ignored, that moment the work and results of the county officer will begin to retrograde. Such I conceive to be the best means attainable to promote the better training and education of our rural school officers and teachers. I care not for names or numbers, but give us a good working combination of county and township officers in the work of local supervision, and I am satisfied as to the results. The inauguration of such a work in the schools, if provision is made for it by proper legislation, will make the coming two years among the most important in the history of Michigan schools.

The Township District.

The second means for securing better management of rural school affairs is a reduction of the number of school officers. This must be had through a reduction of the number of districts by the union of the several districts of a township in one. The township is the corner-stone of American freedom. A recent writer has gone so far as to say that no American state can maintain free and equal institutions for any length of time without the township and the town meeting. The township is the unit in our political system, and should be no less the unit in the educational work of the State. Supt. Smart, of Indiana, in a paper on "The best System of Schools for a State," thus speaks of the unification of school work in township, town (village), and city:

"In most states local corporations for municipal purposes have already been formed; these are called cities, towns, and townships. For obvious prudential and economic reasons the geographical units of school corporations should be coincident with these civil corporations. As a matter of convenience, subdistricts may be formed in school corporations. Unequal distribution of population, the condition of roads, bridges, etc., make it impracticable to fix by general statute the geographical boundaries of subdistricts. As population increases or shifts, and as the condition of roads and bridges is improved, frequent changes in the boundaries of subdistricts must be made; this is especially true in new states. If these changes in boundaries of subdistricts could be made without limitation, by the people themselves, schools would be multiplied almost indefinitely. Hence, districts should be formed and houses located under the authority of the school boards of cities, towns, and townships, and not under the authority of each subdistrict. In each township, town, or city, all the subdistricts should form one system and no more, and should be under the control of one board of school officers. The necessities of the case in respect to the location of schools, in respect to the combination of districts for the establishment of central graded schools, and economy in the matter of

levying local taxes and in the management of the revenues arising therefrom, require a unification of all the schools in the township, town, or city under one board of control."

In the states of Alabama, Indiana, Iowa, Massachusetts, Nevada, New Hampshire, Ohio, Pennsylvania, Rhode Island, Virginia, West Virginia, and Wisconsin, the township system in some form is either in active and successful operation, or laws have been passed looking to its gradual introduction. In every case the success of the system is in direct proportion to the completeness of the control exercised by the township board; and, further, as a rule, the smaller that board the more efficient is its work.

The district system of Michigan was undoubtedly copied from Massachusetts. For 150 years Massachusetts had maintained free schools with the township as the district, when in 1789 a law was passed permitting towns to divide themselves into districts. Horace Mann declared this to be "the most unfortunate law on the subject of common schools ever enacted in the State." It opened a Pandora's box of ills not only for Massachusetts but also for a large number of other states that have taken their system in part from hers. Massachusetts, however, after 60 years of experience with this ill-advised system, decided to resume the township district, and by a permissive law, passed in 1850, opened the way to a return to the wiser system of colonial days. The subsequent history of the movement is worthy of record. The change was made in a few towns only at first, and many were the prophecies of evil that hailed these first experiments under the law. In 1861 the reform had gained such headway that it was made the duty of the townships still divided into districts to vote in township meeting every third year upon the question of abolishing districts. The effect of this was to keep up a systematic agitation of the question. In 1869, as a result of this agitation, the general assembly passed "An act to abolish the school district system," the first section of which read as follows: "The school district system in this Commonwealth is hereby abolished," and the act took effect upon its passage. Mr. White, the Secretary of the State Board of Education, who had done so much to bring about this result, thus speaks in his report for the year 1869–70:

"Although directly affecting probably less than one-third part of the population of the state, yet it is not too much to say that this legislation is unequaled in importance by any on the subject to which it relates for a long period of years. For thirty years, at least, the leading writers and speakers had regarded the so-called district system as an unfortunate interpolation into the public school system of the State, and had earnestly pleaded for its eradication. Every secretary, every agent, and, so far as I am informed, every member of the Board of Education, whatever might have been their views before entering upon their special work, speedily became convinced that the system was an obstacle in the pathway of improvement, and strongly advocated its removal. Gradually, but surely, the opinions thus formed and expressed gained possession of the public till an overwhelming majority of the people had voluntarily abolished the district system, and very few remained to advocate its continuance.

"After ample discussion and several days of delay, at the request of members who desired to consult their constituents, the bill passed the House with only nine votes in the negative, and afterwards the Senate without a dissenting voice.

"Thus, by one wise and most beneficent act, was removed from our school

system that which had long been regarded by the great body of intelligent observers and laborers in the work of education, as more than all things else standing in the pathway of progress. It was indeed a stumbling block and an offense. Being happily removed, the way is opened for the people of the towns where it existed to enter upon a judicious course of action for the improvement of their schools and the better education of their children, with the assurance of the success which has attended the efforts of those towns which had voluntarily abolished the district system."

The law of 1869 was somewhat modified by subsequent acts, and some of its good results were lost. The net result, however, was to do away immediately with the district system in every township where there were not two-thirds of the legal voters in favor of continuing it. The general tendency of public opinion, however, was irresistibly in the direction of the township district. In 1875 only 45 towns retained their division into districts, and during the past year the number has been so far reduced and the towns retaining it are so unimportant that we may fairly say the district system has ceased to exist in Massachusetts. Such is the story of a movement inaugurated over *forty* years ago by Horace Mann. It has been going on during nearly the whole time since Michigan became a State. As early as 1840, Mr. Mann called attention to the evils of the district system. Ten years later, in 1850, the permissive law was passed. The second step was gained with the law of 1861 requiring all townships to submit the question to a vote of the people at stated intervals. The law of 1869, as amended in 1870, at one stroke reduced the number of districted townships to less than 50; and the present year, 1880, sees the township system in successful operation in nearly every township in the State.

The record may dampen the ardor of those who work only for immediate success and for temporary results. It will certainly satisfy any one that great reforms, even when urged on by men of tireless energy, must be wrought out with patience in the face of delays and disappointments. It proves also the value and necessity of wise and persistent agitation to secure any reform in a system that penetrates throughout an entire state and has entered into the habits and social characteristics of the people as fully as has our system of public schools. On the other hand the triumphant result achieved in Massachusetts makes all other efforts in the same direction easy and practicable.

The State of Wisconsin has already enacted a permissive law allowing townships to organize all their districts into one and requiring all new townships to adopt that plan from the start. The only way to accomplish anything in this direction in Michigan is by a similar permissive enactment. The need of such a change is indeed great, yet I would not begin it a day sooner than it can reasonably be certain of securing a fair, honest, and cordial trial. The older counties of the State already present many conditions which seem to point to the necessity of action. I cull a few sample townships. The township of Bruce, Macomb county, has *five* districts whose entire enrollment last year was less than twenty each. The township of Plymouth, Wayne county, has also *five* similar districts, ranging from 9 to 18 pupils each. Walker township, Kent county, has *four* such districts with from 15 to 20 pupils each. Milton township, Cass county; Wheatland, Hillsdale county, and Penfield, Calhoun county, have each *three* districts ranging from 9 to 20 pupils each. The following figures illustrate this wasteful subdivision of districts, showing the number of districts, in 15 of the oldest counties, whose entire enrollment during the school year ending Sept. 6, 1880, was less than twenty-five pupils each:

Oakland	70	districts,	with	from	6	to 24	pupils each
Washtenaw	40	"	"	"	5	to 24	" "
Calhoun	41	"	"	"	6	to 24	" "
Jackson	31	"	"	"	7	to 24	" "
Kent	28	"	"	"	4	to 24	" "
Kalamazoo	32	"	"	"	7	to 24	" "
Van Buren	24	"	"	"	12	to 24	" "
Cass	23	"	"	"	11	to 24	" "
Lenawee	36	"	"	"	8	to 24	" "
St. Joseph	24	"	"	"	9	to 24	" "
Hillsdale	25	"	"	"	11	to 24	" "
Macomb	20	"	"	"	15	to 24	" "
Allegan	20	"	"	"	13	to 24	" "
Branch	12	"	"	"	9	to 24	" "
Berrien	13	"	"	"	16	to 24	" "

Total number of these districts in 15 counties	439
Average number of pupils per district	18
Average number of months of school	7
Average number of months of school in ungraded schools, throughout the State	7.2
Average annual cost per pupil in these districts	$8 38
Average annual cost per pupil throughout the ungraded schools of the State	$6 55

Showing 28 per cent greater average cost per pupil in these districts, with a shorter term of school.

The table shows that with a much greater outlay per pupil there is a result secured in these smaller districts far inferior to the average throughout the State; and an examination and comparison more at length would show still greater disadvantages arising from the subdivision of the township into irregular and changing districts.

But the great advantage to be gained by the township district is the reduction of the number of district officers and the consequent increased efficiency and character of the public service gained thereby. This is so excellently stated by one of my predecessors in this office that I cannot do better than to quote at length from the report of Supt. Briggs for 1873:

"We have an army of school officers in the State exceeding twenty thousand; and it is repeatedly and very naturally urged as an objection to our district system, that the average quality of the officers is inferior, and in many districts where intelligence and character are especially needed even tolerably suitable men can not be secured to hold the office; the public money is oftentimes misapplied and wasted, if not stolen; the law repeatedly violated, and the schools comparatively worthless. But by enlarging the area of the district, a wider opportunity of choice is allowed, a superior average of official character is at once obtained, and more vigor, honor and intelligence is infused into the management of school affairs. But perhaps the most serious objection to the existence of small districts, arises from the difficulties necessarily existing in the way of organization, classification, and gradation of schools. The overwhelming force of this view of the subject is felt, as we know and appreciate the advantages of the gradation of the schools, as adopted and strictly adhered to in our cities and villages; of improved school accommodations, and more

uniformity of management generally. A class of men can be induced to manage the educational affairs of a township that would not be troubled with the affairs of a district one-tenth or one-twelfth of its size. Hence the importance of enlarging the district sufficiently to make the administration of its school affairs an object of dignity and responsibility. In the older and more populous counties of the State, what objection can there be to the territorial identification of the township and the school district? The reasons are ample why they should correspond. The fact that the township is the smallest unit in the civil system renders it desirable for the sake of uniformity alone that it should correspond with the smallest unit of the educational system. It becomes easier thus to preserve in the minds of the people a clear comprehension of the three-fold character of the school system, and the analogy of construction which exists between it and the general civil organization of the State. In 1861 a bill was introduced and considered by the legislature of our State, authorizing the adoption of the township system in such townships as might desire it. It is a matter of record that the bill met with much favor, but, for want of time to perfect it, it was left as a part of the unfinished business of the session. The plan proposed, by the bill referred to, was simply that a township school board should be elected, consisting of six trustees, who should have the exclusive care and control of all the schools in the township, precisely as the school boards in our cities have control of their public schools. The advantages, at that time claimed, are chiefly these:

"1st. It would secure equality of school privileges to all the children in the township, and this would be effected by a township board having the entire field to provide for. 2d. No more school-houses would be built and schools supported than are needed. 3d. Better buildings would be provided. 4th. A happier selection of teachers for particular schools could be had. 5th. Individual favoritism or *nepotism* would not be as likely to have control in the selection of teachers. 6th. It would necessarily lead to a uniformity of text-books, to a gradation of the schools, and consequently to better classification. 7th. It would furnish a more effective supervision of the schools. 8th. A more steady management and more stable support of the schools would be had by a board so much weightier in influence and so remote from petty neighborhood quarrels. 9th. The equitable apportionment of school funds, almost impossible under our present system, would be comparatively easy, as the whole amount would come into the hands of a township board, and be expended by them discreetly, justly, and for the general good."

I need not dwell on this subject much longer. The strongest arguments in its favor are to be had at our own doors. Whatever reputation the school system of Michigan may have abroad has been gained from the great excellence of her village and city schools, and the high character of her University and its departments. The city and village graded schools are indeed worthy the reputation they have gained for the State. But in those schools the thing that has done most to secure their efficiency has been the concentration of work and official responsibility in a few capable men in each community, who have carried forward the interests of the public schools with zeal and intelligence. Could each township place its schools in like manner in the hands of a small board made up of its best men, the interests of our country schools would be greatly advanced, and an excellent class of school officers take the place of many who go through the round of their petty district duties with little care or discretion, except to avoid responsibility of every sort. The graded schools of Michigan educate over two-fifths of the children of the State; and when we

take into consideration the length of the school year and the greater average attendance throughout the year, it is safe to say that they perform nearly one-half the public school service. All this is done and the great interests are managed with care and credit by less than 2,400 school officers. The rural districts perform the other half of the school service, far less efficiently, with a vast army of 18,000 district officers. Would not 3,000 do the work far better? This would give a board of three school officers to each township. Fortunately we have such a board, almost ready to hand, in every township. The Constitution provides for the election of one school inspector in each township each year. Should the term of office be made three years and the three inspectors be chosen, as they naturally would be, with special reference to their fitness for their duties, the schools of our rural districts would soon rival, in character and excellence, the best schools of our cities and villages.

I do not make these suggestions with the thought of urging hasty action. The initiative step may be taken now, or may be put off some years yet; but we may be sure the day is not far distant when our more intelligent rural communities will demand action in this direction to preserve their school interests from the evils and wastefulness of an unwise and unwieldy system that invites and encourages official irresponsibility.

To these two things we must then look for the improvement of our schools; first, to the systematic education of both officers and teachers by means of a better system of local supervision; and second, to a great reduction in the number of school districts and district officers, by the gradual introduction of the township district system. The improvement in local supervision is of highest importance and should be entered upon at once. The township district is certain to come in the near future.

I have dwelt more at length upon the needs of the rural schools because I believe the security and success of the whole system of State education depends upon their intelligent management. The trades and professions and the ranks of the business men of our cities are constantly being recruited from the rural neighborhoods. Our system of schools, in all its parts, is therefore constantly endangered by any neglect of the needs of the country districts. The most important factor in the future development of the State in every respect is to be found in the character and intelligence of the people who thus stand at the fountain head of our political and social life. The interests of the smaller schools are, in the highest degree, the interests of all the people. Make these schools the best we can and they will repay a hundred fold the care and effort spent upon them. Give them the intelligent oversight and the concentrated and business-like administration that have made our graded schools what they are; encourage a better class of teachers to prepare for the higher demands that will thus be created; extend to the township a practicable grading system with its fixed outlines and regular promotion; make the schools of every neighborhood continuous and definite in their character from year to year; equip them with the best facilities for all departments of their work; make them the centers of thought and intelligence in the community by developing the library and every thing else that is in sympathy with the spirit of progress and enlightenment; and our rural schools will become, what they of right ought to be, the pride and glory of the State of Michigan.

Our record of the achievements of the past dwelt largely upon the success of the University and the higher schools, and they are worthy all the praise which we can bestow upon them. But the work of the future lies in another direction, and the best thought and heartiest zeal must be bestowed upon the

schools of the district and township, as the ultimate source and spring of all our social and industrial life. I have endeavored briefly to indicate the direction in which, it seems to me, this energy must be put forth and to forecast something of the results we may look for from these efforts if rightly bestowed. It requires no philosopher to teach us that one-half the schools of a State will not long remain excellent and efficient if the other half are neglected and forgotten. I therefore bespeak for the ungraded rural schools of the State the consideration they deserve and the best care and efforts of all who are interested in our system of free public education.

EDUCATIONAL FUNDS.

The Primary School Funds.

The moneys derived from the sale of school lands and from escheats to the State constitute the Primary School Fund *proper*, and bear seven per cent. interest. One-half the avails of the sale of swamp lands are also set apart as a school fund, bearing five per cent. interest, and this is called the Primary School Five per cent. Fund.

The amounts to the credit of these funds Sept. 30, 1880, together with the income derived from the same, are as follows:

Primary School Fund.

In the hands of the State	$2,554,590 96
Due from purchasers	424,639 15
Total seven per cent. fund	$2,979,230 11
Income	$210,773 15

Primary School Five per cent. Fund.

In the hands of the State	$326,350 95
Due from purchasers	35,368 38
Total five per cent. fund	$361,719 33
Income	$16,181 45
Total income from both funds	$226,954 60

The lands yet remaining unsold will probably increase the principal of these funds by about one million dollars.

The income apportioned to the various counties of the State for distribution last year yielded 47 cents per child of school age.

The University Fund.

This fund, derived from the sale of the lands, now all sold, granted to the State by the general government for the support of a University, draws interest at seven per cent. The amount and income are as follows:

In the hands of the State	$465,788 46
Due from purchasers	73,190 08
Total University fund	$538,978 54
Income	$38,426 98

The Agricultural College Fund.

This fund derived from the sale of lands granted by the State and the general government for the support of the college, draws seven per cent. interest. A large proportion of the lands yet remain unsold. The present state of the fund is as follows:

In the hands of the State	$153,137 70
Due from purchasers	128,311 82
Total Agricultural College fund	$281,449 52
Income	$17,954 82

The Normal School Fund.

This fund is derived from the sale of salt spring lands granted by the State for the support of a Normal School and bears six per cent. interest. The lands are now all sold and the amount of the fund and its income are as follows:

In the hands of the State	$56,635 32
Due from purchasers	12,330 72
Total Normal School fund	$68,966 04
Income	4,310 48

STATE INSTITUTIONS.

The laws regulating the various State institutions, which are educational in character, are not at all uniform in the matter of annual reports. Properly all should report to the Department of Public Instruction so far as relates to their educational work, and the report of this office should thus be an annual conspectus of the educational work of the State in every department. This, however, is not the case with regard to two or three of the State institutions; but by the courtesy of the officers in charge of these I am enabled to present reports or abstracts of reports from all these schools, and they have all heartily responded to every effort designed to establish their relation to the schools in general. Tables XXII and XXIII present some statistical information of especial value in relation to these institutions.

The University.

The present year has been one of the most successful in the history of the University. The report of the acting president, Dr. Frieze, discusses questions of great current interest and embraces several recommendations which will add greatly to the facilities of the institution. The characteristic feature of the true university training is the tendency it cultivates in all who come under its influence toward individual and original research. The library is therefore one of the most important elements of a university foundation. The first salary the University of Michigan ever paid to a professor was to Dr. Asa Gray, the present distinguished scientist and naturalist of Harvard University, and the service he rendered was the purchase of five thousand dollars worth of books in Europe. Thus the very corner-stone of Michigan University was laid in its library. I believe that a great library alone, with adequate

facilities for scholarly research, is quite as deserving the name of a university as most institutions bearing the name in this country. The Boston Public Library, with its special and topical catalogues, its weekly bulletins, and spacious accommodations, is one of the greatest institutions of higher and special culture in the country. The faculty of the University are, in their several departments, and within the limited range afforded by the general library and its accommodations, endeavoring to do a similar work for the students under their charge. It is, however, very desirable that these facilities be greatly extended at once, that the University may not fall lamentably short of its purpose. The library should be largely increased and its accommodations for careful and studious investigation be greatly enlarged. I therefore most heartily join in the recommendation of Acting President Frieze that immediate provision be made for a very large increase of the library and for a building adapted to its wants and those of the University.

The other subjects discussed in the report of the acting president will be found of more than usual interest, and are indicative of the broad and comprehensive spirit in which the University is filling its place in our system of public education. The number of students pursuing post-graduate studies and reading for second degrees shows that the recent changes in courses and requirements for degrees have done much to encourage the true university spirit. Not less noticeable is the number of students in attendance upon the classes who are not candidates for degrees of any kind. The report shows that there are 48 such students, who, without planning to study for a degree, have sought the scholarly atmosphere of the University to devote a year or more to reading and general culture under the direction of its faculty. There can be no question of the great value of such a seat of scholarship to the State. With the varied courses to select from there is hardly a high school or community in the State that should not be represented upon the University lists; and the question of a practicable and permanent relation between the University and the high schools thus becomes one of the most important. In some way the University should be enabled to show its interest in every community, and to extend its hand to any high school where a single teacher is trying to elevate the standard of his work, or where a single boy or girl aspires to any one of the courses of liberal culture pursued within its halls.

The standards of admission to the professional schools have been somewhat raised and the courses lengthened, but the very large and increasing classes in these schools suggest the thought that the University can, safely and with honor to itself, elevate still higher the standards for admission and graduation, and thus serve the State by protecting the public more fully "from imposition, charlatanism, and quackery in the professions which deal with the interests of life and property." Numbers alone do not make a great University. Of degrees conferred on examination, there are *three* in philosophy and *two* in arts, while only *one* each in medicine and in law. The University may easily place itself in the front rank in the matter of professional training, and afford facilities for exhaustive study in the higher fields of law and medicine, such as are now to be had only in the great German universities, by thus elevating the standards, both for matriculation and for the final degrees.

The University and State have been honored by the appointment of President Angell to the important position of United States Minister to China, and chief of the treaty commission to that country. It is expected that with the accomplishment of the special objects of the commission, the negotiation

of new treaties of commerce and emigration between this country and China, the president will soon return to his labors in the institution which he has served with such distinguished success and fidelity for nearly ten years.

The Normal School.

The year at the Normal School has been one of the best in its history. The results of several changes in the methods and organization are just becoming apparent, and with the hearty and unusually harmonious coöperation of the several members of the faculty the institution seems to have entered upon an era of prosperity and success. The changes referred to, which were inaugurated a few years ago, were regarded by many of the friends of the school and by interested observers in other States with some misgiving. It is too much to say that everything is completely and exactly adjusted, and that the school has solved every question regarding its relation to professional and academic work in the preparation of teachers; but it is not too much to say that the change has passed the experimental and doubtful stage, and needs only time and experience to develop a most happy realization of the wishes of the best friends of the school.

This "new departure" is based upon the theory that the school should as far as possible be a professional school for teachers; that the academic preparation in the branches to be taught should mainly be gained in the ordinary public and graded schools; and that the Normal School should supplement this preparation by brief courses of review and practice-teaching, together with thorough instruction in good methods from the experienced teachers of its faculty. It is thought that with proper preparation in the branches to be taught, a year of such training and practice-teaching at the Normal School will be sufficient to enable the student to teach successfully in the grade for which he is prepared. It is held that students should come to the school with definite preparation for certain work, that they should be encouraged to hold strictly to that purpose and secure, without any delay or diversion, the training for the grade in the school service for which they have prepared. In this view of the office of a Normal School, it is a training school rather than an academy or college, and it should yearly send out hundreds of trained and practiced teachers who will immediately find themselves at home in the school-room.

In carrying out this work the school will, in the future, graduate a larger proportion of trained teachers for grade and department work in the graded schools and for the best class of district schools. Its work and success will be measured by the number and character of the teachers it sends into the primary grades rather than by the principals and preceptresses it furnishes to the high schools. Not that any class of educational workers should be neglected, but that the school can best justify its existence by training for the most elementary work with the greatest care and liberality. Such I conceive to be the spirit and purpose of the new departure in the Normal School. It recognizes that school as a part of the system of the State; it proposes to supplement the academic work of the public schools by practical and professional training; and it seeks especially to train those who have to lay the foundations of education in the susceptible mind of early childhood. For the foundation is, of necessity, the broadest part and comprehends or contemplates all the rest of the structure.

Dr. Malcolm MacVicar, who assumed the Principalship of the school soon after the opening of the present school year, has entered with enthusiasm upon

his work, and has most efficiently coöperated with the Board of Education in all their plans. The school and the State are to be congratulated upon the accession of so scholarly and efficient a leader in the work of the professional training of teachers. The suggestions and observations recorded in the report of the Committee of Visitors are worthy of special attention.

The Agricultural College.

The report of President Abbot regarding the condition of the Agricultural College leaves little to be said concerning that institution. The character of the instruction given, and of the branches pursued are yearly becoming more adapted to the purposes of the students. The prominence given to the practical sciences and their applications to the farm and farm industry is certainly very proper. The quality of academic scholarship has not been sacrificed, but it has been turned into such lines of study as are especially fitting to be pursued by intelligent and progressive farmers. The prominence of English studies and the discontinuance of all instruction in ancient and foreign languages are noteworthy. Justice demands that the College pay high regard to culture studies, and that a most thorough course of training be afforded the student in this direction. At the same time it is not necessary or desirable that any wide range of selection be afforded in this particular. The main outlay of energy and equipment must be in the direction of the special work of the school as a school of farmers. Therefore it was thought that a thorough and scholarly training in the English language and in English classic literature would best subserve the purposes of literary culture; and that the high development of such a course would be better than to dissipate the available forces over a wide range of linguistic studies.

The decision is one alike creditable to the faculty and to the controlling board, and should meet the cordial approval and support of every friend of the College. It has silenced many antagonisms and given the College a rank and character in our school system that cannot but increase its usefulness. The friends of genuine scholarship need not fear that the quality and finish of the literary work done will suffer from this change. It will rather have an opposite result if the present purposes of those in charge of the institution are carried out. And nothing should be allowed to stand in the way of this full development of the College as a school of high scholarship and manly culture for the farmers of Michigan. The need of a library building with proper facilities for reading and special study is greatly felt. The best interests of every student require such accommodations immediately to be provided. The better the man, the better the farmer, and the greater his influence among his fellows. I therefore trust that immediate provision will be made for a library building at the College.

I cannot, in this connection, forbear to mention the excellent work done by the faculty of the College in the series of Farmers' Institutes, held in various parts of the State each winter. It has been my good fortune to attend several of these institutes, and to meet and talk with the farmers and other citizens of the State upon the subject of the needs of the schools. The interests of the public schools have always received intelligent consideration, and probably more school officers are reached in this way than through the same number of teachers' institutes as they are usually held. As a means of spreading special and general intelligence, I consider these farmers' institutes of great value to the cause of education, and susceptible of still greater development for good.

The Reform School.

The report of Superintendent Howe discusses the work and needs of the Reform School very fully. The year has been one of the best under the skillful management of the present superintendent. It has shown the results of his steady and faithful discipline, and proved the wisdom of the change which he inaugurated upon entering upon his work. No work can be more important in its results than that which is given to help boys to make a right start in life, and to retrace devious paths. The culture of manliness, and the bringing out of the self-respect of the boys, the appreciation of the good that is in them, the exhibition of a firm and steady manhood that will command their respect and win their confidence, have always been the most successful means of reform and discipline in every class of schools. The Reform School is no exception in this respect to the general rule. Many would indeed question whether the boys were much different from, or any worse than, the average city and village boys. The training of all such boys is a very important educational problem, but the conditions at the Reform School are so much the same as are found everywhere that it simply becomes a question of the discreet and manly training of a class of bright, active-minded boys, who have probably seen more of the unfortunate and hard side of life, but who are as keen and sensitive as any with whom the teacher has to deal.

The responsibility is indeed greater than in ordinary cases, because no ordinary city superintendent is held to so strict accountability for the whole character and performance of the boys under his care—and it seems to me that every public school man might well take a lesson in regard to his responsibility for the training and character of his boys by observing the workings of the Reform School.

The needs of the school, as stated by the Superintendent and Board of Control, include an appropriation for a chapel. Such a building can hardly be dispensed with in a community of boys such as we find at the Reform School. It should embrace under its roof, besides the chapel or assembly room proper, rooms for a library and a reading room where the boys can at proper hours find their home papers and other periodicals, and be led to cultivate a taste for reading. If such rooms could be properly supplied with good reading matter and be open to the boys by sections or classes every day, it would be a great help in discipline and education.

The State Public School.

This is one of the most important of the State's educational charities and it has attracted wide attention as almost the first attempt to establish a home and school for dependent children, separate from the almshouse and its cheerless associations. The year has been one of the most prosperous, both in the character and amount of work done. The training imparted to the boys and girls is of great value, and the hope inspired into the dark lives of the unfortunate children will change the future of large numbers.

Too much care cannot be taken in securing homes for the children when they leave the school, and in following them up and seeing that they are rightly cared for and kindly treated. The habits of industry and obedience which are learned at the school will save many a youth from a life of crime and shame, and prove a blessing to the State as well as the child; but the care and watchfulness should be kept up until the child is safely and per-

manently housed and homed and able to enter upon a career of honest self dependence.

THE INSTITUTION FOR THE DEAF AND DUMB.

With the removal of the blind from the institution at Flint there has been a very decided increase of facilities for the care of the deaf and dumb. By the courtesy of the principal I am enabled to learn from his report somewhat in detail the success of the institution during the past year.

The report discusses at some length the results obtained in teaching articulation to the deaf-mute. From these it would seem that there can be no doubt of its success as a method of communication for this class of unfortunates. Within a few years great advances have been made in all institutions of this kind. In Europe the voice-method is very generally adopted and the last international congress of teachers of deaf-mutes held in Italy was practically unanimous in its favor. So great an advance in means and methods of communication may well call for congratulations from all interested in educational progress.

The year at the Flint institution has been one of unusual change, both in the character of the institution and in the corps of teachers, but the experienced hand of the new principal has avoided every danger and brought the school through with a success equal to that of any former year.

THE SCHOOL FOR THE BLIND.

The location of this school at Lansing has been considered only temporary, and so the institution lacks many of the facilities of a well regulated home for this class of dependents. It has, however, comfortably cared for a large number of those who have formerly been in the Flint institution, and the first year has so far been one of great prosperity and excellent results, considering the inconveniences attending the opening of the school in a temporary building. The new principal, Mr. McElroy, has shown excellent skill in his work and has made the school a success from the start.

THE REFORM SCHOOL FOR GIRLS,

located during the past year near Adrian, is not yet in operation, but will probably be opened during the coming year. The plans of the Board of Control contemplate a school of the best type, which shall do a noble work for the class for which it is designed. No charity is more worthy a great state and the efforts of the Board should be seconded by the hearty support of all public-spirited citizens.

INCORPORATED INSTITUTIONS.

The reports from these institutions, as far as received, will be found in their proper place in the accompanying documents. The statistical information, gleaned from special reports, as given in tables XXII and XXIII, presents a very gratifying exhibition of their work in the educational field and of their capacity for usefulness. They report an aggregate attendance of 2,565 students; the employment of 102 instructors; a permanent investment of over $700,000; and a productive endowment of nearly $650,000. With such facilities for good and efficient work these institutions form a very important element in the school

system. This investment of money and effort does not in the least detract from the power of the State University and other higher schools. It is in reality so much added to the working capital of the educational forces and strengthens every tendency towards education and culture.

I have, during the past year, visited several of these chartered institutions and have found them doing a most valuable work in the interest of higher education. They are gradually improving their facilities with the increase of endowments and permanent improvements, and so are taking better rank every year. I wish that fuller reports of the condition and progress of these schools were to be had for publication. Formerly the reports embodied in the Superintendent's report were merely reprints or abstracts of the annual catalogues. Such reports, reproducing year after year the courses of study and other economic details of the internal workings of the institutions, are a compliance with the letter rather than the spirit of the law. What we should have is a brief, matter-of-fact statement of the year's work, the condition and prospects of the institution with regard to students, graduates, endowments, permanent improvements, and all other matters of general interest. I shall be glad to publish such reports and believe that the schools will thus be more properly and fairly represented to the State and to their friends and patrons.

THE COMMON SCHOOLS.

The statistics presented in the general summary, table I, show the condition and growth of the graded and ungraded schools of the State. These statistics, gathered from the reports of directors and inspectors, indicate a healthy and progressive condition of school affairs. There is usually to be noted an increase over last year in such items as we would wish to see increased, and a decrease wherever decrease is a sign of progress. In my last year's report these statistics showed a state of facts in regard to attendance that was anything but satisfactory. With an increase in the number of school-children during the previous year of 10,187, the total attendance upon school was 17,564 less than during the year ending September 2, 1878. The year ending September 6, 1880, on the other hand, has shown an increase in the school census of 19,328, and in the total attendance of 20,418; making the increase of attendance 1,190 greater than the increase in the total number of school children, and a consequent increase of 1.4 in the percentage of attendance. The ungraded schools have had by far the greater share of this increased attendance, and the increase in the percentage of attendance in these schools is 3.4, while there was a small decrease in percentage of attendance in the graded schools. The ungraded schools are still, however, nearly 5 per cent below the percentage of attendance reported two years ago. The increase of last year is to be attributed in no small degree to the better character of the schools maintained in the rural districts. This is in its turn largely due to the influence of the county institutes held during the year; and it is believed that, with the help of these institutes and the better sentiment prevailing in regard to local supervision, the schools are finally and permanently on the up-grade, and will show steady increase in all things that measure their excellence and success.

The reduction of the general tax for school purposes from two mills to one mill is to some extent made good by the higher assessment of taxable property; so that the tax, though nominally reduced one-half, in reality yields about 77 per cent of the amount of the previous year.

GRADED AND HIGH SCHOOLS.

The number of these schools reported by the township inspectors is 389, an increase of 36 over the previous year. The statistics of these schools are given at length in table XIV. These items, however, are gleaned entirely from the reports of township inspectors. In tables XV, XVI, XVII, XVIII, and XIX, I have collected some information gained from the replies to a circular issued from this office in May. The information is of a valuable character, and should be secured from all graded schools in the State; but the replies to my circular were very meagre and partial, and entirely wanting from all but the schools named in these tables. It would be well, I think, to make a separate form for the reports from graded schools, and to require such information as will be of special interest to that class of schools. But there are also a considerable number of items of great interest that can best be furnished at the close of the school term in June, and to secure these some provision should be made for a special report at that time. Probably the best arrangement would be to require a director's report of general statistics, to be made out at the usual time in September, and a principal's or superintendent's report, to be forwarded to this office after the close of the school term. The nature of the growth of the graded school system of Michigan is the only thing that can account for the absence of some such provision in our laws. There has never been, with the exception of a few schools acting under special charters, any difference made between graded and ungraded schools in the reports that have come to this office. So far as the legal status of these schools is concerned, this is as it should be; but as our graded schools have now come to be so important an interest, embracing not only the primary schools for nearly half the population of the State, but also the secondary schools for the entire people, it is fitting that some special statistics be gathered, designed to meet the special inquiries that so frequently come to us regarding this great element in our school system. There must of necessity be many things in common to these four hundred schools which all would like to know, and which would tend to create a feeling of comity and mutual help among a large class of officers and teachers, whose interests are so nearly akin.

The high schools have been for a number of years coming together in their plans and courses, and have had more regard to their place in the work of the schools. Their relations to the University and the Normal School, to their home communities, to the surrounding schools, and to the lower grades in their own schools, have all been made prominent in the thought and discussions of educational men for some years past. In this way the high school has been emphasized, its character has been more clearly determined and brought within reasonable limitations, and with this has also come a feeling that there is a peculiar work for the schools of our smaller villages which is quite distinct from that of the high schools of the large villages and cities. I have been pleased to notice the interest taken in this question, and am confident that with the adoption of a practicable ten-years course of study a new era will dawn upon many of the smaller villages of the State in the matter of their schools. As I remarked in a former report, there is an inherent difference between the work required of the smaller village school and that done in the larger village or city. The class of pupils is essentially different, and a far larger proportion of them are from the country. The great mass of non-resident pupils in the State are in schools of less than 500 scholars. It is probable that there are more

teachers for country schools educated at Northville, Parma, Galesburg, and Lowell, than in Detroit, Jackson, Kalamazoo, and Grand Rapids. Thus the smaller graded school bears a much closer relation to the ungraded schools of the country district than does the city school. Its field is peculiar. It holds a very close relation to the normal work of the State, and in this respect possesses the widest opportunities for usefulness. The population it serves is not as homogeneous or compact as that of our cities, but no class deserves better of the State, and upon no class so largely depends the future weal of the schools.

For a more extended discussion of this subject, together with the opinions of a large number of excellent teachers connected with these schools, I would refer to my report for the year 1878.

The Ungraded Schools

have been discussed quite at length in the earlier part of this report. I am satisfied that these schools deserve and will have the best thought and care of all friends of education in the State. More than twenty years ago, Supt. Gregory, speaking of these schools, said: "Out of imperfect and erroneous views of education, or, perhaps, entire absence of views, it has come to pass that nothing like a regular course of study has ever been introduced into the primary schools, much less any course based upon the laws of mental growth, or conformed to the natural progress of mental development. They have no established sequence of studies, except that learning to read stands necessarily first. Beyond that, each pupil follows his own bent or the caprice of his parents. It is very much as if a farmer should follow no certain order in the cultivation of his harvest, but perform the different operations at random, perhaps sowing his seed, then plowing his land,—sending the reapers forth at seed time and the cultivators in harvest. Equally ill-assorted and without certain order, are frequently the courses of study pursued by pupils in the primary schools. Studies are begun without reference to the pupil's capacity, and changed without regard to his progress."

The schools have improved in twenty years, and there is to be found in many districts, though as yet in a small minority of the whole number, very excellent attempts at grading and regular pursuit of studies. Yet Dr. Gregory's words are too true of a large class of our primary schools. The grading system is being very generally introduced into the rural schools of several States; but these have the advantage of the township-district system with township grammar or high schools, which form the center and incentive of a much better kind of work in all the subordinate schools of the township.

As I have remarked before, the first step toward a permanent and radical improvement of the schools is to be made in the better education of school officers and teachers, and of the people at large. I have seen the results of such an awakening in may districts in this State during the time I have been connected with the schools. No State has more intelligence in matters educational than our own. The trouble is, that the district system isolates every man from his neighbor and prevents the union of intelligent men for concert of action throughout a number of schools. The success of the schools must rest upon public opinion, but public opinion implies a public large enough to have deep conviction and resolute purpose, which, when aroused and concentrated, become resistless. I have seen the best schools I ever found anywhere, in the rural districts; and I have seen such schools in a single year become the

most lawless and disgraceful by the change of a teacher or on account of the removal of a single public-spirited man from the district. The schools should not be the creatures of such accidents. An efficient local supervision, that will unite the townships of the county and the districts of the township, in its workings will do much to strengthen a right public opinion, and give it steadiness and force. With that accomplished, the township district system will naturally follow as the next step in our educational progress.

LIBRARIES.

Tables IX and X give interesting statistics regarding the condition of the libraries of our cities, townships, and districts. The increase in number of books over the previous year is 13,805. The total amount expended on libraries during the year was $35,544.20, against $22,910.57 for the previous year, an increase of over 55 per cent. The amount expended was a little in excess of the receipts for the year for library purposes, showing that a trifle of the thousands of dollars diverted from the library fund during past years is coming back to its rightful purpose again as a sort of conscience fund.

A circular sent from this office during the year on the subject of libraries, containing the new lists of books advertised to be furnished at contract prices, has no doubt had much to do with awakening the attention of school officers to this question. The district libraries, however, are in a large majority of cases practically abandoned. The amount of the fund that comes to each district is so small that it is generally turned into the common account and no notice is taken of it. I am convinced that it is almost impossible to maintain district libraries in any other than graded districts. The country library, to be of any value, must be a township library. Such a library rightly managed will be of far more value to each school in the township than any district library in the State. Real economy, also, favors maintaining township libraries. There is a saving by purchasing a large number of books at once; and a wider range of selection is furnished without any chance of duplicating.

Of the 1,035 townships of the State, 334 report township libraries, while the remainder, 701, attempt to maintain district libraries. But there are only 1,268 district libraries in these 710 townships, or an average of *less than two* district libraries to each township. The 334 townships embrace about 2,000 districts. Add to these the 1,268 districts having a separate library, and we find a total of only 3,268 districts, or about one-half the number in the State, having any advantages of either township or district library. So far as I know all the townships that have a township library maintain it with a fair degree of success, while less than one-third of the districts acting independently have any library whatever. These are the facts as nearly as I can glean them from the figures before me. They indicate great wastefulness of the library funds, and seem to point to the township library as the only practical means of securing economy in the administration of this great interest. I shall try to investigate this question yet more fully during the coming year, and do what I can to awaken an interest in the library of the rural districts and townships.

TEACHERS' INSTITUTES.

The items of interest regarding teachers' institutes held during the past year are summarized in Tables XX and XXI. The institute law has proved a great

lutely necessary to a proper administration of the school laws. There is such a large number of school officers, and their business ability and legal experience are so varied that the laws should be freed from all entanglements and complexity. Frequent letters come to this office asking help to unravel these cross-purposes in the law.

Of the need of some legislation in regard to local supervision, I have spoken at length elsewhere. I only ask for a scheme of supervision, *including examination and visitation*, by a combination and coöperation of county and township officers. Of the details I am not nearly so particular as in regard to the general principles of such a system.

The county should be the unit of territory over which the examining authority should have control.

The choice of this authority should be removed as far as possible from the influence of the political caucus.

The examining authority should be a board rather than an individual.

The visitation of schools should be mainly done by the township officer, under direction of the county examiners.

The county officer should assist in the work of visitation so far as possible in all difficult cases, and whenever called upon by the township visitor.

The township officer should assist in the examination by reporting in detail upon the work of all teachers, and especially of those whose certificates are about to expire.

The county and township officers should meet in joint conference for mutual help and information.

Some change is desirable in the provision fixing the qualifications of voters in district meetings. Persons who have no immediate interest, either as taxpayers or as parents of pupils, sometimes get control of district meetings and vote down those having a real interest in the schools. The law should be so modified as to limit voting at district meetings to those having an interest in the schools, either as taxpayers or as patrons.

The provision empowering the district meeting to decide by vote whether the school shall be taught by male or female teachers has been provocative of much more harm than good. The Supreme Court has decided that it has no application to graded and union schools, and it should be dropped entirely from the law.

There has been a great degree of looseness in the transaction of business by district boards, and many times the most important contracts are made by district officers, without any authority, and even when meetings are held no record is kept of the proceedings. A similar neglect of a plain duty is seen in the lack of any record book or register in a large number of schools. The law should require all school business to be done at a regular board meeting, that proper record of all proceedings be kept, and that every teacher be furnished with a book for daily register of pupils' attendance, and such other items as are required.

The library law, in so far as it provides for district libraries, is of no effect except in graded school districts, and a few others of unusually large enumeration. I would suggest that provision be made for a township library in every township, and that only such districts as have a school enumeration of 100 or over be allowed to draw their share of the library moneys for the maintenance of a separate library. Such large districts should be allowed the option of

maintaining a district library under proper restrictions, or of joining with other districts in a township library. Further, every township or district should be required to report on the expenditure of its last allowance from the library fund before receiving its share in another distribution.

There has been some confusion as to how far the primary school law applied to graded school districts, and it has been necessary, in some cases, to resort to the courts and finally to the Supreme Court for a decision. It will no doubt be possible to limit more clearly the application of these laws in such cases by a simple amendment.

Whenever a provision can be secured enabling the people of any township, by a two-thirds vote and under other proper restrictions, to combine all their schools under the management of a board of township school inspectors, properly constituted, I think it should be done. No sweeping enactment should be made and no action taken prematurely, but this important subject should receive earnest consideration on the part of all.

Two very important decisions of the Supreme Court affecting the rights and duties of district boards have been rendered during the year. These will be found in full in another part of this report.

IN CONCLUSION,

I am glad to be able to report a year of great advance in all things that help on the good cause of education in our midst. Many influences are tending to make a better and higher public sentiment regarding the rights and duties of public schools. In the general and inevitable progress of public affairs in this progressive generation, the public schools have more than kept up with the State at large. In my sphere I have endeavored to help on this progress, and I have been ably, grandly, and heartily supported by the entire body of teachers throughout the State. No man ever had truer and steadier support in any public station. The performance of the detail work of the office has been greatly lightened by the labors of Mr. W. L. Smith, the efficient Deputy Superintendent of Public Instruction, who has brought to the varied duties of his position rare tact and ability.

CORNELIUS A. GOWER,
Superintendent of Public Instruction.

STATISTICAL TABLES.

TABLE I.

Comparative Summary of Statistics for the Years 1879 and 1880.

Items.	1879.	1880.	Increase or Decrease.
GENERAL.			
Districts and Schools. (Table IV.)			
Whole number of school districts	6,252	6,352	100
Whole number of districts that reported having maintained school during the year.	6,148	6,263	115
Average number of months that schools were maintained	7.5	7.5	.0
Whole number of children between five and twenty years of age	486,993	506,221	19,228
Whole number of children attending public schools	342,138	362,556	20,418
Percentage of attendance	70.2	71.6	1.4
Employment of Teachers. (Table V.)			
Number of men teachers employed	3,954	4,072	118
Number of women teachers employed	9,662	9,877	215
Whole number of teachers employed	13,616	13,949	333
Aggregate number of months taught by men	18,545.2	19,166.6	621.4
Aggregate number of months taught by women	46,371.9	46,765.2	393.3
Total aggregate number of months taught	64,917.1	65,931.8	1,014.7
Total wages of men teachers	$717,491 61	$714,567 35 *d*	$2,924 26
Total wages of women teachers	$1,163,453 63	$1,203,416 64	$39,963 01
Total wages of teachers	$1,880,945 24	$1,917,983 99	$37,038 75
Average wages per month of men teachers	$38 69	$37 28 *d*	$1 41
Average wages per month of women teachers	$23 48	$25 73	$2 25
School Houses. (Table IV.)			
Number of frame school houses	4,878	4,949	71
Number of brick school houses	802	816	14
Number of log school houses	567	560 *d*	7
Number of stone school houses	78	75 *d*	3
Whole number of school houses	6,325	6,400	75
Whole number of sittings in school houses	441,291	446,029	4,738
Estimated value of school property	$9,011,454 00	$8,977,844 00 *d*	$33,610 00
Financial. (Tables VI, VII, VIII.)			
Amount of moneys brought over from preceding school year	$729,744 96	$790,595 00	60,850 04
Amount received from one-mill tax *a*	*a* 494,011 38	379,757 93 *d*	114,253 45
Amount received from income of primary school fund	229,384 98	223,525 21 *d*	5,859 77
Amount of non-resident tuition received	34,487 94	34,925 68	437 74
Amount received from district taxes	2,049,755 29	2,074,073 37	24,318 08
Amount received from all other sources	306,406 31	286,320 78 *d*	20,085 53
Total resources for the year	$3,843,790 86	$3,789,197 97 *d*	$54,592 89

a Two-mill tax in 1879.

TABLE I.—*Continued.*

Items.	1879.	1880.	Increase or Decrease.
Financial—(Continued):			
Amount paid men teachers	$712,594 79	$714,072 85	$1,478 06
Amount paid women teachers	1,160,865 26	1,195,868 22	35,002 96
Amount paid for building and repairs	364,135 38	356,240 02	d 7,895 36
Amount paid on bonded indebtedness	329,466 96	333,998 48	4,531 52
Amount paid for all other purposes	497,576 49	509,735 57	12,159 08
Amount carried over to succeeding school year	779,151 98	679,282 83	d 99,869 15
Total expenditures for the year, including amount carried over	$3,843,790 86	$3,789,197 97	d $54,592 89
Bonded indebtedness of the districts	$1,325,700 00	$1,293,451 55	d $32,248 45
Floating indebtedness of the districts	85,941 52	96,074 10	10,132 58
Total indebtedness of the districts	1,411,641 52	1,389,525 65	d 22,115 87
Amount due the districts from all sources	279,416 02	149,705 06	d 129,710 96
Miscellaneous. (Tables IV, VIII.)			
Number of townships and independent districts reporting	1,064	1,075	11
Amount paid and due inspectors for services.	$12,462 96	$8,205 98	d $4,256 98
Amount paid and due township superintendents for services as reported by inspectors.	$17,541 00	$21,068 78	$3,527 78
SPECIAL.			
Ungraded School Districts:			
Number of ungraded school districts	5,899	5,963	64
Number of children between five and twenty years of age	287,878	292,509	4,631
Number of children attending school	208,001	221,403	13,402
Percentage of attendance	72.2	75.6	3.4
Average number of months schools were maintained	7.2	7.3	.1
Number of men teachers employed	3,469	3,526	57
Number of women teachers employed	7,695	7,776	81
Whole number of teachers employed	11,164	11,302	138
Aggregate number of months taught by men	14,450.2	14,690.4	240.2
Aggregate number of months taught by women	28,363.9	28,149	d 214.9
Total aggregate number of months taught	42,814.1	42,839.4	25.3
Total wages of men teachers	$432,513 47	$404,253 59	d $28,259 88
Total wages of women teachers	$511,319 03	$527,693 58	$16,374 55
Total wages of teachers	$943,832 50	$931,947 17	d $11,885 33
Average wages per month of men teachers	$29 93	$27 52	d $2 41
Average wages per month of women teachers	$18 03	$18 75	$0 72
Total expenditures for the year	$1,363,634 24	$1,361,702 19	d $1,932 05
Estimated value of school property	$3,264,769 00	$3,151,126 00	d $113,643 00
Total indebtedness of the districts	$170,579 41	$187,581 81	$17,002 40
Graded School Districts. (Table XIV.)			
Number of graded school districts	353	389	36
Number of children between five and twenty years of age	199,115	213,712	14,597
Number of children attending schools	134,137	141,153	7,016
Percentage of attendance	67.4	66	d 1.4
Average number of months schools were maintained	9.4	9.4	0

TABLE I.—*Continued.*

Items.	1879.	1880.	Increase or Decrease.
Graded School Districts—(Continued):			
Number of men teachers employed	485	546	61
Number of women teachers employed	1,967	2,101	134
Whole number of teachers employed	2,452	2,647	195
Aggregate number of months taught by men	4,095	4,476.2	381.2
Aggregate number of months taught by women	18,008	18,616.2	608.2
Total aggregate number of months taught	22,103	23,092.4	989.4
Total wages of men teachers	$284,978 14	$310,313 76	$25,335 62
Total wages of women teachers	$652,134 60	$675,723 06	$23,588 46
Total wages of teachers	$937,112 74	$986,036 82	$48,924 08
Average wages per month of men teachers	$69 59	$69 33 *d*	$0 26
Average wages per month of women teachers	$36 21	$36 29	$0 08
Total expenditures for the year	$1,701,004 64	$1,748,212 95	$47,208 31
Estimated value of school property	$5,746,685 00	$5,826,718 00	$80,033 00
Total indebtedness of the districts	$1,241,062 11	$1,173,003 84 *d*	$68,058 27
Libraries. (Tables IX, X.)			
Number of district libraries (including cities)	1,275	1,272 *d*	3
Number of township libraries	333	334	1
Whole number of libraries	1,608	1,606 *d*	2
Number of volumes in district libraries	172,719	182,898	10,179
Number of volumes in township libraries	75,471	79,095	3,624
Whole number of volumes in libraries	248,190	261,993	13,803
Amount paid for support of district libraries	$16,043 14	$26,378 74	$10,335 60
Amount paid for support of township libraries	$6,867 43	9,104 71	$2,237 28
Total amount paid for support of libraries	$22,910 57	$35,483 45	$12,572 88
Teachers' Institutes. (Tables XX, XXI.)			
Number of State teachers' institutes held	56	65	9
Number of men enrolled at institutes	1,511	1,403 *d*	108
Number of women enrolled at institutes	2,633	3,079	446
Total enrollment at institutes	4,144	4,482	338
Received from county treasurers for support of institutes	$5,313 03	$6,667 49	$1,354 46
Received from State treasurer for support of institutes	$1,748 46	$1,800 00	$51 54
Total amount received and expended for support of institutes	$7,061 49	$8,467 49	$1,406 00
Private and Select Schools. (Table XI.)			
Number of private and select schools	208	264	56
Estimated number of pupils attending schools	18,253	18,854	601

TABLE II.

Summary of Township Superintendents' Reports for Official Year ending April 5, 1880.

Items.	Estimated Totals for the State.[a]
Number of districts having a uniform list of text-books	2,663
Number of districts having a prescribed course of study	752
Number of schools that are properly classified	1,667
Number of districts supplied with a register or record	4,918
Number of districts making no change in teachers during year	1,076
Number of districts having three terms of school during year	2,087
Number of districts requiring teachers to "board around"	1,999
Number of regular examinations held during year	1,986
Number of special examinations held during year	5,440
Number of applicants examined	12,913
Number of first grade certificates issued	1,060
Number of second grade certificates issued	3,198
Number of third grade certificates issued	7,691
Number of applicants rejected	1,409
Number of certificates renewed without examination	1,135
Number of teachers summoned for re-examination	136
Number of certificates revoked or suspended	42
Number licensed who had no experience in teaching	2,714
Number of different teachers employed any portion of the year	11,260
Number of unlicensed teachers employed any portion of the year	194
Number of teachers holding Normal School diplomas	294
Number of teachers who make teaching a profession	4,292
Number of meetings of township institutes or associations	337
Number of teachers attending township institutes or associations	1,119
Number of visits to schools by township superintendents	13,101
Number of different schools visited by township superintendents	6,451
Number of schools not visited by township superintendents	348
Number of days given to the work of superintendency	14,975
Amount allowed by township board for official services	$29,025 70
Amount of allowance for stationery, etc	$1,280 07
Amount received from applicants for special examinations	$1,421 28
Total amount received by township superintendents	$31,727 06

[a] Reports were received from 911 superintendents, leaving 125 superintendents not reporting; the totals herein given are estimated for the entire State, being based upon the totals of the reports received.

TABLE III.

Apportionment of the Primary School Interest Fund for 1880.

Counties.	Whole Number of Children.	Number included in the Apportionment.	Amount Apportioned.
Alcona	696	696	$327 12
Allegan	12,137	11,863	5,575 61
Alpena	1,876	1,876	881 72
Antrim	1,528	1,513	711 11
Baraga	578	578	271 66
Barry	8,057	8,013	3,766 11
Bay	8,822	8,753	4,113 91
Benzie	942	920	432 40
Berrien	12,109	12,075	5,675 25
Branch	8,142	8,100	3,807 00
Calhoun	11,222	11,222	5,274 34
Cass	6,773	6,738	3,166 86
Charlevoix	1,563	1,520	714 40
Cheboygan	1,599	1,599	751 53
Chippewa	1,070	1,035	486 45
Clare	771	771	362 37
Clinton	8,670	8,670	*4,122 90
Crawford	215	215	101 05
Delta	1,169	1,119	525 93
Eaton	9,116	9,061	4,258 67
Emmet	1,328	1,254	589 38
Genesee	11,909	11,840	5,564 80
Gladwin	146	146	68 62
Grand Traverse	2,269	2,269	1,066 43
Gratiot	6,688	6,623	3,112 81
Hillsdale	9,744	9,639	4,530 33
Houghton	7,232	7,188	3,378 36
Huron	6,256	6,108	2,870 76
Ingham	10,046	10,046	4,721 62
Ionia	10,023	10,023	4,710 81
Iosco	1,406	1,374	645 78
Isabella	3,474	3,328	1,564 16
Isle Royal			
Jackson	11,650	11,631	5,466 57
Kalamazoo	9,791	9,791	4,601 77
Kalkaska	835	831	390 57
Kent	22,366	22,242	10,453 74
Keweenaw	1,422	1,422	668 34
Lake	844	844	396 68
Lapeer	9,252	9,213	4,330 11
Leelanaw	2,035	1,929	906 63
Lenawee	14,181	14,061	6,608 67
Livingston	6,829	6,829	3,209 63
Mackinac	808	715	336 05
Macomb	10,781	10,748	5,051 56

* Including deficiency of $48.00 for 1879.

TABLE III.—*Continued.*

Counties.	Whole Number of Children.	Number included in the Apportionment.	Amount Apportioned.
Manistee	3,125	3,087	$1,450 89
Manitou	418	418	196 46
Marquette	6,009	5,987	2,813 89
Mason	2,515	2,411	1,133 17
Mecosta	4,039	3,988	1,874 36
Menominee	1,268	1,242	583 74
Midland	1,885	1,832	861 04
Missaukee	300	300	141 00
Monroe	12,118	11,886	5,586 42
Montcalm	8,291	8,146	3,828 62
Muskegon	7,173	7,087	3,330 89
Newaygo	4,223	4,107	1,930 29
Oakland	12,064	12,003	5,641 41
Oceana	3,341	3,311	1,556 17
Ogemaw	194	173	81 31
Ontonagon	1,072	1,072	503 84
Osceola	3,066	3,033	1,425 51
Otsego	404	395	185 65
Ottawa	11,385	11,273	5,298 31
Presque Isle	549	292	137 24
Roscommon	71	71	33 37
Saginaw	17,594	17,533	8,240 51
St. Clair	16,320	16,244	7,634 68
St. Joseph	8,281	8,188	3,848 36
Sanilac	8,892	8,705	4,091 35
Schoolcraft	225	206	96 82
Shiawassee	8,159	8,159	3,834 73
Tuscola	8,109	8,007	3,763 29
Van Buren	9,655	9,518	4,473 46
Washtenaw	12,924	12,857	6,042 79
Wayne	53,481	53,358	25,078 26
Wexford	1,473	1,460	686 20
Totals	486,993	482,780	$226,954 60

TABLE IV.

General School Statistics, as reported by School Inspectors for the Year ending September 6, 1880.

Counties.	Number of townships and cities reporting.	Whole No. of School Districts.	Number of Districts that Maintained School during year.	Number of Graded Schools.	Whole No. of Children between five and twenty years of age.	Number of Children that attended school during the year.	Average Number of months schools were maintained.	Number of School Houses and Material of Construction.				Number of pupils that can be seated.	Estimated value of School property.
								Stone.	Brick.	Frame.	Log.		
Alcona	4	19	19	1	809	553	7.2	....	....	11	8	819	$15,743
Allegan	24	181	180	11	12,104	9,584	7.6	....	12	160	5	12,837	169,788
Alpena	5	7	7	1	2,159	1,260	6.6	....	1	20	4	1,584	25,800
Antrim	13	57	53	1	1,689	1,342	6.2	....	1	20	33	2,303	27,962
Baraga	4	6	5	2	605	411	6.6	....	....	5	1	330	6,000
Barry	17	146	146	3	8,315	7,132	7.6	....	5	134	7	8,731	129,412
Bay	21	64	63	5	10,520	6,291	7.5	....	8	55	7	6,550	209,695
Benzie	12	29	27	1	977	749	5.9	....	....	17	8	1,029	9,580
Berrien	21	149	148	12	12,095	9,673	7.5	....	33	124	....	12,534	281,150
Branch	17	132	132	7	8,175	7,192	7.7	12	31	91	1	9,277	168,475
Calhoun	22	167	166	8	11,118	9,028	7.7	6	34	136	2	12,215	430,120
Cass	16	120	119	6	6,705	5,663	7.9	....	24	94	....	7,293	118,260
Charlevoix	13	58	53	1	1,765	1,237	6.	....	....	27	23	2,019	16,294
Cheboygan	8	29	29	1	1,833	1,215	6.1	....	1	11	17	1,521	21,482
Chippewa	1	13	8	1	1,255	430	6.7	....	1	5	3	725	17,650
Clare	8	26	25	2	838	630	5.4	....	....	11	7	893	12,001
Clinton	16	131	127	8	8,576	6,993	8.1	....	12	116	2	8,000	123,945
Crawford	7	16	15	....	274	238	6.1	....	....	10	2	428	5,238
Delta	9	21	18	1	1,474	1,091	5.9	....	....	10	5	918	9,470
Eaton	17	145	145	8	9,331	7,869	7.4	1	20	124	4	9,188	149,782
Emmet	11	45	39	2	1,868	1,160	5.	....	....	14	16	1,443	13,101
Genesee	19	161	160	10	11,844	9,760	7.7	....	13	155	2	11,452	244,023
Gladwin	2	10	9	....	216	156	7.	....	....	5	5	315	3,794
G'd Traverse	10	52	52	1	2,430	2,013	6.8	....	....	39	16	2,784	30,745
Gratiot	16	115	114	4	7,129	5,917	7.4	....	3	100	6	6,971	74,767
Hillsdale	19	172	170	12	9,670	8,136	8.	9	48	115	2	11,394	214,020
Houghton	7	11	10	9	8,719	4,894	10.2	2	1	11	2	4,368	136,200
Huron	26	86	85	6	6,852	4,281	7.2	....	1	57	24	5,498	52,435
Ingham	17	134	134	9	10,091	7,861	8.	....	22	116	2	9,649	263,595
Ionia	17	143	142	12	10,219	8,280	7.7	1	13	132	2	10,059	141,859
Iosco	10	18	17	4	1,764	970	5.9	....	....	15	3	893	19,007
Isabella	16	79	79	2	3,768	2,916	6.9	....	....	50	25	3,716	32,660
Isle Royal													
Jackson	20	156	156	9	11,714	9,196	8.2	2	55	109	1	11,979	278,625
Kalamazoo	16	140	140	7	9,858	7,742	8.5	....	19	118	7	10,296	189,005
Kalkaska	9	38	37	1	917	769	6.	....	....	29	7	1,350	15,511
Kent	25	209	209	13	22,644	15,471	7.9	....	30	190	4	18,175	562,210
Keweenaw	7	10	10	3	1,586	1,111	10.3	....	....	11	1	1,318	19,700
Lake	12	45	45	....	933	771	6.	....	....	27	13	1,365	14,980
Lapeer	19	133	133	8	9,705	7,722	8.	2	5	125	4	9,607	141,910
Leelanaw	10	49	49	2	2,136	1,443	5.5	1	1	25	22	2,309	18,910
Lenawee	24	201	201	13	14,130	11,202	7.8	8	82	119	2	14,054	350,361
Livingston	16	132	131	5	6,701	5,706	7.8	4	12	114	1	7,809	109,094
Mackinac	5	11	10	1	833	474	5.5	....	....	6	3	665	4,219
Macomb	14	114	114	9	10,806	6,797	8.2	....	16	101	....	8,824	124,550
Manistee	11	36	35	1	3,478	2,232	7.1	....	2	23	7	2,350	52,424
Manitou	3	4	4	....	370	237	6.5	....	....	2	2	390	530
Marquette	13	27	27	8	7,249	4,930	7.6	2	2	21	6	4,133	169,720
Mason	14	47	46	1	2,714	2,104	6.9	....	1	28	12	2,414	35,838
Mecosta	17	76	75	2	4,257	3,320	7.2	....	....	53	22	4,278	50,915
Menominee	7	16	14	1	2,114	1,092	7.5	....	....	15	1	1,289	16,232
Midland	13	48	47	2	2,076	1,621	7.	....	2	26	16	2,398	18,905
Missaukee	9	31	30	....	343	296	5.6	....	....	14	10	1,760	8,170
Monroe	16	137	136	6	11,884	7,454	7.6	2	58	72	5	9,349	104,138
Montcalm	21	114	112	9	8,907	6,698	8.	....	3	104	6	8,181	134,776

TABLE IV.—*Continued.*

Counties.	Number of townships and cities reporting.	Whole No. of School Districts.	Number of Districts that Maintained School during year.	Number of Graded Schools.	Whole No. of Children between five and twenty years of age.	Number of Children that attended school during the year.	Average Number of months schools were maintained.	Number of School Houses and Material of Construction. Stone.	Brick.	Frame.	Log.	Number of pupils that can be seated.	Estimated value of School property.
Muskegon	18	84	79	5	8,141	4,903	6.8	....	4	68	9	6,126	$156,186 00
Newaygo	17	86	84	4	4,420	3,313	6.9	....	5	65	15	4,621	64,232 00
Oakland	25	220	219	16	11,945	10,280	7.8	13	30	180	....	13,790	269,680 00
Oceana	16	82	81	3	3,510	2,753	6.8	....	....	67	14	3,990	43,505 00
Ogemaw	7	23	20	....	316	266	5.	....	....	8	8	532	6,425 00
Ontonagon	4	7	7	4	1,071	857	9.1	....	....	6	2	918	12,700 00
Osceola	16	68	68	3	3,289	2,432	6.8	....	....	39	27	3,446	35,889 00
Otsego	7	26	25	....	502	385	5.7	....	....	19	4	900	10,885 00
Ottawa	17	118	116	16	11,440	8,415	8.3	....	8	110	1	10,013	150,580 00
Presque Isle	6	17	14	....	812	486	4.2	....	....	8	7	741	9,176 00
Roscommon	----	----	----	----	----	----	----	....	....	----	....	----	----
Saginaw	30	136	134	9	19,263	11,397	8.9	....	15	127	6	12,243	356,309 00
St. Clair	25	152	151	8	16,471	11,175	7.8	....	11	138	8	12,964	201,291 00
St. Joseph	16	125	125	9	8,237	6,882	8.	2	30	92	....	8,765	231,775 00
Sanilac	25	122	119	10	9,523	6,742	7.4	....	3	91	24	7,519	63,681 00
Schoolcraft	2	2	2	....	68	47	7.1	....	1	.....	1	230	7,000 00
Shiawassee	18	121	121	6	8,344	6,731	7 9	....	7	109	7	8,371	156,575 00
Tuscola	23	125	123	7	8,597	6,465	7.5	....	5	110	11	7,772	79,961 00
Van Buren	18	152	151	14	9,497	7,961	7.8	....	14	141	....	11,239	194,780 00
Washtenaw	22	166	166	7	12,801	9,974	8.2	8	61	105	1	12,021	315,340 00
Wayne	20	146	145	15	55,723	26,005	8.6	....	50	110	1	25,472	983,022 00
Wexford	17	58	56	1	1,759	1,414	6.4	....	....	34	18	2,377	26,214 00
Totals	1,075	6,352	6,263	389	506,221	362,196	7.6	75	816	4,949	560	446,029	$8,977,844 00

TABLE V.

Employment of Teachers, as reported by School Inspectors for the year ending September 6, 1880.

Counties.	No. of Teachers Employed. Men.	Women.	No. of Teachers Counted Twice. Men.	Women.	Aggregate No. of Months Taught by all the Teachers. Men.	Women.	Total Wages of Teachers for the Year. Men.	Women.	Average Wages of Teachers per Month. Men.	Women.
Alcona	5	24	.....	.....	27.	123.5	$1,576 00	$4,363 75	$58 37	$35 33
Allegan	95	311	11	50	445 5	1,210.2	14,874 10	24,776 84	33 39	20 47
Alpena	7	28	.....	2	55.	195.	3,270 00	7,502 00	59 45	38 47
Antrim	20	71	1	15	88.5	283.7	2,782 50	7,233 18	31 44	25 49
Baraga	5	6	.....	.....	46.	36.	2,773 00	1,336 25	60 28	37 12
Barry	108	238	12	45	419.	853 5	11,239 60	13,263 20	26 83	15 54
Bay	29	116	5	9	180.9	858.8	9,100 05	28,206 70	50 30	32 84
Benzie	11	35	.....	5	51.	132.4	1,771 50	2,679 54	34 73	20 24
Berrien	102	260	8	37	473.7	1,128.4	18,554 09	27,125 93	37 17	24 04
Branch	103	232	11	27	439.6	847.2	13,625 69	19,892 24	31 13	23 49
Calhoun	118	295	12	48	509.1	1,303.	17,234 04	31,832 59	33 85	24 43
Cass	92	196	8	31	390.2	739.6	13,277 75	14,079 20	34 03	19 04
Charlevoix	23	64	.....	4	100.7	229.3	2,488 00	4,491 30	24 51	19 59
Cheboygan	17	27	.....	.....	109.2	112.5	4,502 00	2,377 50	41 23	21 13
Chippewa	4	5	.....	.....	32.	29.5	1,400 00	943 00	43 75	31 97
Clare	11	31	.....	4	44.7	109.3	1,474 40	2,411 60	32 98	22 06
Clinton	98	182	11	42	387.1	677.	12,421 95	15,503 55	32 12	22 90
Crawford	6	18	.....	2	27.	63.8	818 00	1,960 36	30 30	21 32
Delta	5	24	.....	3	29.	161.5	1,789 50	5,620 00	61 01	34 79
Eaton	97	242	3	25	387.5	1,013.4	10,551 08	20,918 96	27 23	20 64

TABLE V.—*Continued.*

Counties.	No. of Teachers Employed.		No. of Teachers Counted Twice.		Aggregate No. of Months Taught by all the Teachers.		Total Wages of Teachers for the Year.		Average Wages of Teachers per Month.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Emmet	9	49	------	5	44.5	182.8	$1,604 00	$3,042 50	$36 04	$16 64
Genesee	119	257	8	18	522.1	1,290.7	18,805 52	30,571 45	36 02	23 69
Gladwin	------	11	------	------	------	53.	------	1,580 00	------	29 81
G'd Traverse	39	63	------	5	168.6	197.5	5,712 66	6,588 23	33 88	33 36
Gratiot	73	159	1	19	317.7	599.9	9,918 20	10,763 48	31 22	17 94
Hillsdale	139	254	7	17	629.3	1,118.2	16,168 90	18,561 52	25 69	16 60
Houghton	23	57	------	------	209.1	417.	16,847 50	22,853 25	80 57	54 80
Huron	42	86	------	8	252.1	434.9	8,712 86	9,445 38	34 56	21 71
Ingham	85	275	5	26	369.2	1,215.5	13,198 38	25,055 52	35 75	20 61
Ionia	116	232	3	32	490.	953.	16,616 12	20,193 76	33 91	21 19
Iosco	9	24	------	1	68.2	140.5	3,319 50	4,333 66	48 67	30 84
Isabella	46	89	5	15	153.7	348.4	5,587 79	7,716 44	36 35	22 15
Isle Royal	------	------	------	------	------	------	------	------	------	------
Jackson	114	315	2	19	508.	1,472.3	22,204 50	37,440 14	43 71	25 43
Kalamazoo	102	260	7	14	426.7	876.7	14,782 78	30,598 05	34 64	34 90
Kalkaska	29	47	2	8	79.6	154.6	2,223 00	3,008 60	27 93	19 46
Kent	148	398	12	32	719.6	2,127.5	31,148 47	63,876 48	43 29	30 03
Keweenaw	9	9	------	1	76.	71.	5,190 00	2,854 25	68 29	40 20
Lake	15	61	3	8	72.	208.4	1,757 00	4,592 45	24 40	22 04
Lapeer	91	194	5	21	431.6	885.3	15,599 64	18,602 54	36 14	21 01
Leelanaw	24	50	4	6	100.	194.5	2,904 00	3,636 04	29 04	18 69
Lenawee	151	359	10	29	650.5	1,562.4	23,098 76	34,269 71	35 51	21 93
Livingston	103	198	6	17	414.9	765.8	12,907 86	12,660 84	31 11	16 54
Mackinac	4	7	------	2	33.5	39.	1,650 00	1,316 00	49 25	33 76
Macomb	68	156	2	13	360.1	781.1	14,504 39	17,448 73	40 29	22 34
Manistee	14	53	1	5	84.4	312.2	3,600 25	10,465 78	42 66	33 52
Manitou	5	1	------	------	21.	4.	645 00	160 00	30 71	40 00
Marquette	19	68	------	3	149.	557.7	12,827 96	21,144 25	86 09	37 91
Mason	20	66	2	10	109.8	311.4	3,531 77	8,452 57	32 16	27 14
Mecosta	29	116	2	20	202.3	521.6	5,464 90	13,073 30	27 01	25 07
Menominee	6	22	4	------	35.	94.4	2,447 50	4,665 25	69 93	49 42
Midland	18	63	4	7	90.	284.	2,922 90	6,491 47	32 48	22 87
Missaukee	15	28	2	1	65.5	103.5	1,785 75	2,204 06	27 27	21 29
Monroe	95	179	7	22	408.8	742.4	12,451 50	13,419 20	30 46	18 08
Montcalm	78	186	7	23	364.5	831.3	13,636 42	20,496 57	37 41	24 66
Muskegon	26	145	1	16	150.3	781.8	7,683 00	22,671 97	51 12	28 99
Newaygo	31	133	7	20	155.5	514.3	5,441 00	10,815 05	34 99	21 03
Oakland	162	293	4	33	742.8	1,736.5	25,368 45	27,378 68	34 29	15 76
Oceana	52	109	4	19	195.2	427.6	6,417 90	9,450 40	32 88	22 10
Ogemaw	5	19	------	------	21.5	78.	668 00	2,411 50	31 07	30 92
Ontonagon	7	15	------	------	63.1	130.	4,546 25	4,330 00	72 05	33 30
Osceola	41	86	5	14	163.3	347.4	5,600 60	8,792 55	34 29	25 31
Otsego	6	26	2	1	24.	118.7	697 23	2,655 46	29 05	22 37
Ottawa	81	172	10	30	392.4	955.	16,684 00	21,947 78	42 52	22 99
Presque Isle	15	6	1	1	47.5	20.	1,398 16	699 00	29 43	34 95
Roscommon	------	------	------	------	------	------	------	------	------	------
Saginaw	80	233	3	21	486.	1,432.4	24,507 90	47,400 24	50 43	33 10
St. Clair	76	218	8	30	423.5	1,159.2	14,442 18	27,517 73	34 10	23 74
St. Joseph	97	211	8	37	435.1	889.3	16,606 50	21,268 60	38 17	23 93
Sanilac	67	21	8	23	395.9	560.3	12,165 99	11,176 00	30 29	19 95
Schoolcraft	1	1	------	------	11.	3.	660 00	70 00	60 00	23 33
Shiawassee	105	200	15	32	426.4	777.8	13,756 11	15,971 23	32 26	20 54
Tuscola	80	148	11	18	387.1	662.6	13,135 90	13,731 40	33 94	20 72
Van Buren	95	251	8	43	448.7	969.8	15,373 25	20,434 08	34 26	21 07
Washtenaw	119	279	6	15	604.8	1,499.3	24,452 70	37,177 33	40 43	24 73
Wayne	101	435	6	19	631.1	3,402.6	32,706 95	163,419 75	51 83	48 03
Wexford	21	79	3	18	91.4	339.5	2,996 25	6,598 73	32 78	19 44
Totals	4,072	9,877	303	1,146	19,166.6	46,765.2	$714,567 35	$1,203,416 64	$37 28	$25 73

TABLE VI.

Resources of School Districts, as Reported by School Inspectors for the Year ending September 6, 1880.

Counties.	Moneys on hand Sept. 1, 1879.	One-Mill Tax.	Primary School Interest Fund.	Library Moneys.	District Taxes for all Purposes.	Raised from all other Sources.	Total Resources for the Year.
Alcona	$3,008 11	$4,231 31	$307 37	----------	$4,414 45	$2,230 18	$14,191 42
Allegan	16,966 96	8,636 42	5,523 26	$409 91	34,418 84	4,657 71	70,613 10
Alpena	2,879 34	521 00	741 40	74 29	12,939 64	821 78	17,977 45
Antrim	2,737 55	953 45	647 05	----------	11,091 07	1,378 82	16,807 94
Baraga	2,595 25	501 21	277 20	44 04	4,612 68	96 99	8,127 37
Barry	7,548 21	4,818 81	3,846 05	156 52	28,308 96	2,919 79	47,598 34
Bay	18,072 24	10,978 46	4,066 39	265 59	42,517 41	1,804 00	77,704 09
Benzie	1,261 84	444 20	331 19	----------	4,461 08	763 39	7,261 70
Berrien	17,701 11	14,354 01	5,279 58	353 18	51,974 09	3,532 35	93,194 32
Branch	13,210 50	4,687 93	3,210 10	141 00	33,438 74	5,284 62	59,972 89
Calhoun	16,988 86	7,111 44	5,607 04	181 09	63,149 28	7,764 94	100,802 65
Cass	10,588 68	4,221 70	3,093 59	442 27	24,196 71	4,589 59	47,132 54
Charlevoix	1,646 85	363 20	573 61	38 80	9,742 32	1,230 10	13,594 88
Cheboygan	1,139 03	1,445 16	766 05	----------	9,274 19	786 83	13,411 26
Chippewa	114 33	2,108 13	520 16	10 00	3,130 60	2,978 66	8,861 88
Clare	2,787 24	921 51	283 78	1 69	5,885 11	1,579 60	11,458 93
Clinton	9,837 59	4,369 76	4,073 27	227 89	29,090 86	2,995 75	50,595 12
Crawford	356 45	669 19	98 12	44 81	2,561 89	583 32	4,313 78
Delta	2,504 08	1,139 59	555 49	6 97	6,941 21	975 06	12,122 40
Eaton	8,372 96	6,318 09	4,293 48	----------	30,724 95	5,571 27	55,280 75
Emmet	1,070 72	548 30	413 90	6 58	8,245 65	3,239 05	13,524 20
Genesee	17,082 14	17,068 98	5,601 09	1,772 47	44,610 76	5,609 33	91,744 77
Gladwin	1,260 16	641 87	115 89	----------	1,830 00	693 20	4,541 12
G'd Traverse	4,174 64	1,319 57	1,035 47	----------	13,709 27	1,276 63	21,515 58
Gratiot	12,684 31	4,591 06	3,102 73	189 95	24,097 25	6,487 08	51,102 38
Hillsdale	9,272 58	16,981 43	4,691 30	312 29	32,159 03	3,803 81	67,220 44
Houghton	19,937 24	408 87	2,817 74	85 91	55,720 97	2,866 24	81,836 97
Huron	5,968 86	3,372 11	2,690 59	120 21	18,677 05	1,691 99	32,510 81
Ingham	9,561 82	12,037 96	4,871 87	288 13	39,011 03	3,760 17	69,530 98
Ionia	10,986 02	13,900 99	4,444 12	336 48	38,223 35	5,522 91	73,413 87
Iosco	2,306 18	958 34	603 97	122 53	9,007 32	3,874 99	16,873 33
Isabella	5,588 45	3,022 40	1,463 18	----------	17,536 97	3,311 98	30,922 98
Isle Royal	----------	----------	----------	----------	----------	----------	----------
Jackson	28,649 20	8,927 38	5,602 89	988 00	64,721 22	5,961 92	114,850 61
Kalamazoo	22,797 32	17,701 79	4,955 92	974 08	39,680 34	4,337 69	90,447 14
Kalkaska	2,630 84	1,272 60	392 71	20 19	5,912 28	935 66	11,164 28
Kent	33,445 79	17,645 48	10,666 94	2,089 84	109,064 26	12,730 49	185,642 80
Keweenaw	1,778 71	1,006 73	529 69	183 38	8,638 10	280 49	12,417 10
Lake	4,639 63	2,065 77	339 29	1 63	6,811 45	1,435 75	15,293 52
Lapeer	9,783 81	11,000 75	4,315 20	391 21	33,560 29	4,678 12	63,679 38
Leelanaw	1,618 32	977 85	867 23	----------	6,871 21	1,117 78	11,452 39
Lenawee	14,459 00	12,509 12	6,739 26	1,045 77	59,713 19	15,094 75	109,560 09
Livingston	6,533 86	5,795 28	3,164 04	59 87	24,291 61	2,585 65	42,429 81
Mackinac	2,583 32	1,045 17	356 09	----------	2,118 39	781 00	6,883 97
Macomb	10,120 05	15,385 77	5,276 67	218 87	18,511 18	3,413 51	52,926 05
Manistee	3,581 06	1,215 33	1,502 10	215 43	18,901 75	4,980 80	30,396 61
Manitou	350 66	48 21	196 38	6 25	331 35	582 07	1,514 92
Marquette	14,889 26	3,671 37	2,198 98	----------	46,862 04	5,470 57	73,092 22
Mason	5,190 86	1,307 78	1,013 58	271 39	12,579 35	7,550 38	27,913 29
Mecosta	11,306 90	2,440 13	1,885 01	268 20	21,959 82	2,704 20	40,564 26
Menominee	2,782 33	1,128 88	370 77	1 45	9,025 65	2,670 72	15,929 80
Midland	2,314 05	581 49	728 75	94 38	15,350 70	2,802 99	21,852 36
Missaukee	3,204 12	1,085 67	111 36	----------	4,584 09	566 08	9,551 32
Monroe	8,543 68	5,293 22	5,616 24	688 01	19,706 09	4,203 05	44,050 29
Montcalm	12,932 14	7,448 63	3,571 24	326 15	46,321 78	3,977 90	74,577 84
Muskegon	9,191 51	2,536 87	3,315 93	343 38	46,123 24	3,887 79	65,388 72
Newaygo	6,166 39	1,655 47	1,772 51	63 10	19,502 16	7,677 88	36,837 51
Oakland	13,370 39	12,395 31	5,938 29	1,545 28	49,178 83	4,937 19	87,365 29
Oceana	6,054 63	1,640 21	1,517 27	33 97	15,243 72	1,431 26	26,121 06
Ogemaw	1,057 63	262 00	52 94	----------	4,335 33	388 99	6,096 89

TABLE VI.—*Continued.*

Counties.	Moneys on hand Sept. 1, 1879.	One-Mill Tax.	Primary School Interest Fund.	Library Moneys.	District Taxes for all Purposes.	Raised from all other Sources.	Total Resources for the Year.
Ontonagon	$6,854 24	$1,227 72	$393 37	$49 27	$10,208 94	$288 19	$19,021 73
Osceola	7,059 77	1,559 61	1,413 16	9 65	18,184 96	2,419 20	30,646 35
Otsego	1,721 79	359 61	136 06	----------	6,264 21	1,549 96	10,031 63
Ottawa	22,661 38	5,081 88	5,140 76	232 72	42,001 93	10,980 68	86,099 35
Presque Isle	655 24	780 71	79 54	----------	1,230 31	1,231 47	3,977 27
Roscommon	----------	----------	----------	----------	----------	----------	----------
Saginaw	21,653 06	12,315 96	8,197 96	415 36	88,419 92	4,658 49	135,660 75
St. Clair	17,680 60	5,477 77	7,413 64	164 35	46,016 05	10,840 18	87,592 89
St. Joseph	12,789 08	15,962 87	4,124 48	483 63	29,727 67	3,179 82	66,267 55
Sanilac	8,033 82	3,503 86	3,737 68	----------	21,131 57	4,536 06	40,942 99
Schoolcraft	206 92	447 01	----------	----------	428 05	1,357 87	2,439 85
Shiawassee	10,763 59	5,690 37	4,006 43	258 53	32,998 03	3,440 32	57,152 27
Tuscola	10,348 42	2,148 77	3,593 48	229 29	27,280 27	5,613 86	49,214 09
Van Buren	11,197 53	7,639 57	4,323 07	133 23	30,455 99	9,346 40	63,095 79
Washtenaw	13,146 65	13,054 62	6,259 89	366 24	61,403 55	21,874 61	116,105 56
Wayne	163,232 73	10,389 19	25,102 01	5,267 77	218,483 18	12,102 54	434,577 42
Wexford	2,514 42	2,257 75	660 37	6 43	14,242 59	2,931 46	22,613 02
Totals	$790,595 00	$379,757 93	$223,525 21	$23,028 45	$2,074,073 37	$298,218 01	$3,789,197 97

TABLE VII.

Expenditures of School Districts (Including amount on hand), as Reported by School Inspectors for the Year ending September 6, 1880.

Counties.	Paid Teachers.	Paid for Building and Repairs.	Paid for Library books and care of Library.	Paid on Bonded Indebtedness.	Paid for all other Purposes.	Amount on hand September 6, 1880.	Total Expenditure for the Year, Including Amount on hand.
Alcona	$5,601 10	$2,711 02	----------	$887 35	$1,575 39	$3,416 56	$14,191 42
Allegan	39,572 44	8,197 29	$382 98	3,048 24	9,010 87	10,401 28	70,613 10
Alpena	10,772 00	2,891 68	93 00	----------	2,604 16	1,616 61	17,977 45
Antrim	9,164 24	1,187 52	----------	295 00	3,233 35	2,927 83	16,807 94
Baraga	4,115 25	79 00	73 31	----------	833 91	3,025 90	8,127 37
Barry	24,132 41	2,615 80	40 40	7,999 10	5,828 07	6,982 56	47,598 34
Bay	37,532 75	3,223 44	459 19	11,062 89	12,729 66	12,696 16	77,704 09
Benzie	4,451 04	690 11	----------	376 92	573 94	1,169 69	7,261 70
Berrien	45,536 09	5,154 37	70 25	20,395 51	9,734 95	12,303 15	93,194 32
Branch	33,454 88	4,081 46	207 84	4,129 42	7,907 50	10,101 79	59,972 89
Calhoun	48,903 13	9,889 46	374 58	18,351 03	10,695 28	12,589 17	100,802 65
Cass	27,425 15	3,879 76	577 75	684 00	6,116 39	8,449 49	47,132 54
Charlevoix	6,901 90	2,165 71	----------	504 18	2,030 67	1,992 42	13,594 88
Cheboygan	6,800 77	1,051 00	----------	1,020 00	2,032 28	2,507 21	13,411 28
Chippewa	2,420 75	3,399 71	----------	545 67	916 38	1,579 37	8,861 88
Clare	3,831 80	2,206 16	----------	1,516 83	1,367 35	2,586 79	11,458 93
Clinton	28,058 13	3,355 62	43 85	6,483 16	5,029 37	7,624 99	50,595 12
Crawford	2,300 03	170 71	----------	49 90	1,273 11	520 03	4,313 78
Delta	7,295 00	745 98	----------	1,303 60	1,516 05	1,261 77	12,122 40
Eaton	31,267 82	6,388 31	----------	3,410 37	6,155 15	8,059 10	55,280 75
Emmet	5,005 69	2,114 64	5 00	1,741 76	2,328 52	2,328 59	13,524 20
Genesee	48,664 88	6,031 25	797 27	13,771 30	11,543 98	10,936 09	91,744 77
Gladwin	1,410 00	842 51	----------	590 73	879 74	818 14	4,541 12
G'd Traverse	12,282 20	2,094 91	2 00	1,974 86	2,130 29	3,031 32	21,515 56
Gratiot	20,874 65	12,269 16	71 89	2,936 52	7,749 08	7,201 08	51,102 38
Hillsdale	35,522 90	4,078 83	13 85	7,436 10	7,268 56	12,900 20	67,220 44
Houghton	39,700 75	1,925 66	222 46	7,000 00	16,219 53	16,768 57	81,836 97
Huron	18,503 03	3,435 44	74 68	1,623 02	4,357 91	4,516 73	32,510 81
Ingham	33,138 90	5,590 96	208 82	3,222 83	12,810 74	9,558 73	69,530 96
Ionia	37,022 11	9,492 58	128 84	8,487 80	7,808 81	10,473 73	73,413 87

TABLE VII.—*Continued.*

Counties.	Paid Teachers.	Paid for Building and Repairs.	Paid for Library books and care of Library.	Paid on Bonded Indebtedness.	Paid for all other Purposes.	Amount on hand September 6, 1880.	Total Expenditures for the Year, Including Amount on hand.
Iosco	$7,200 47	$792 18		$4,511 78	$1,950 07	$2,418 83	$16,873 33
Isabella	13,466 54	5,011 33	$7 00	2,267 17	3,081 64	7,089 30	30,922 98
Isle Royal							
Jackson	59,610 89	18,806 51	242 40	10,154 89	16,952 67	9,083 25	114,850 61
Kalamazoo	45,404 29	14,565 34	823 62	5,832 23	9,013 47	14,758 19	90,447 14
Kalkaska	5,043 99	1,514 43	30 82	650 00	2,078 07	1,846 97	11,164 28
Kent	94,510 10	11,876 84	4,612 30	20,642 09	21,688 16	32,313 31	185,642 80
Keweenaw	8,044 25	71 79	287 13	1,396 60	1,929 56	687 77	12,417 10
Lake	6,130 70	1,290 02		1,338 70	1,480 22	5,053 88	15,293 52
Lapeer	34,076 47	3,995 03	310 63	7,629 70	7,202 38	10,465 17	63,679 38
Leelanaw	6,528 37	1,565 21		744 90	950 41	1,663 50	11,452 39
Lenawee	57,002 28	9,744 47	877 56	11,928 62	19,011 02	10,996 14	109,560 09
Livingston	25,598 45	3,030 07	9 50	4,023 21	5,115 70	4,652 87	42,429 81
Mackinac	2,841 98	273 19			650 21	3,118 59	6,883 97
Macomb	32,026 98	1,111 10	295 98	1,261 59	5,936 38	12,294 02	52,926 05
Manistee	14,066 05	7,398 74	216 52	168 33	3,809 72	4,737 25	30,396 61
Manitou	772 43	109 65			298 61	334 23	1,514 92
Marquette	34,112 13	5,206 48	352 60	2,220 55	19,478 56	11,721 90	73,092 22
Mason	11,842 07	6,122 99	16 90	1,408 79	2,596 71	5,925 83	27,913 29
Mecosta	18,436 61	4,072 26	20 00	1,229 07	5,435 99	11,370 33	40,564 26
Menominee	7,044 78	2,460 72		1,814 55	1,576 16	3,033 59	15,929 80
Midland	9,457 54	1,428 05	132 75	4,343 33	3,298 14	3,192 55	21,852 36
Missaukee	3,946 28	1,959 88		19 79	1,038 33	2,587 04	9,551 32
Monroe	26,038 01	3,189 41	524 11	1,708 54	5,057 16	7,533 06	44,050 29
Montcalm	33,927 49	6,990 60	66 81	8,448 31	7,303 97	17,840 66	74,577 84
Muskegon	30,408 82	3,568 01	387 20	15,291 89	7,304 15	8,428 65	65,388 72
Newaygo	16,231 05	4,804 35	50 00	3,889 12	4,357 14	7,505 85	36,837 51
Oakland	52,588 63	3,668 46	367 60	11,021 25	9,850 32	9,869 03	87,365 29
Oceana	15,451 62	2,245 29	95 39	607 95	2,626 54	5,094 27	26,121 06
Ogemaw	3,193 28	586 74		100 00	1,175 00	1,041 87	6,096 89
Ontonagon	8,876 25	800 18	30 41		2,074 88	7,240 01	19,021 73
Osceola	14,445 15	6,347 11		1,858 63	3,861 46	4,134 00	30,646 35
Otsego	3,546 65	2,043 39		953 50	1,544 24	1,943 85	10,031 63
Ottawa	38,881 90	20,133 16	233 04	5,965 89	11,538 02	9,347 34	86,099 35
Presque Isle	2,057 51	492 17	6 70	155 37	1,031 11	234 41	3,977 27
Roscommon							
Saginaw	71,880 68	9,034 29	1,644 19	14,300 79	17,736 19	21,064 61	135,660 75
St. Clair	41,710 54	7,344 72	256 68	3,094 08	18,962 06	16,224 51	87,592 59
St. Joseph	37,758 60	2,540 15	315 03	8,080 93	7,991 74	9,581 10	66,267 55
Sanilac	23,306 13	5,085 99	3 13	2,438 28	4,951 88	5,157 58	40,942 99
Schoolcraft	880 00			940 80	189 82	429 23	2,439 85
Shiawassee	29,712 54	4,558 39	490 01	3,697 08	7,454 00	11,240 25	57,152 27
Tuscola	25,358 29	6,002 71	22 99	1,511 50	6,581 24	9,737 36	49,214 09
Van Buren	35,291 23	4,022 35	90 51	6,035 45	7,542 60	10,113 65	63,095 79
Washtenaw	61,545 78	11,497 77	329 00	18,556 91	15,726 42	8,449 68	116,105 56
Wayne	193,261 20	32,350 24	9,382 27	9,141 92	36,460 08	153,981 71	434,577 42
Wexford	9,764 28	4,568 21		1,716 31	3,113 64	3,450 58	22,613 02
Totals	$1,909,941 07	$356,240 02	$26,378 74	$333,998 48	$483,356 83	$679,282 83	$3,789,197 97

TABLE VIII.

Miscellaneous Financial Statistics, as reported by School Inspectors for the Year ending September 6, 1880.

Counties.	Bonded Indebtedness of the Districts.	Total Indebtedness of the Districts.	Amount due the Districts.	Amount Received by the Districts for non-resident Tuition.	Amount Paid and due Inspectors for Services.	Amount Paid and due Township Sup'ts for Services.
Alcona	$1,300 00	$2,741 16	$1,166 71	----------	$90 75	$37 50
Allegan	8,132 22	9,059 21	1,260 11	$641 57	141 60	691 18
Alpena	----------	3,378 10	11,774 47	----------	61 00	187 68
Antrim	2,526 50	3,331 22	246 89	12 50	106 75	142 50
Baraga	----------	4 00	119 75	----------	27 00	30 00
Barry	50,757 00	51,559 82	492 71	171 58	97 50	379 96
Bay	34,596 00	35,862 49	1,845 61	25 00	149 25	193 23
Benzie	567 34	597 28	410 30	12 25	39 89	82 25
Berrien	59,242 63	60,146 15	5,776 66	968 53	133 75	365 10
Branch	17,850 08	18,564 89	591 74	1,365 55	118 50	462 19
Calhoun	121,437 00	122,259 48	986 73	1,985 33	121 25	622 47
Cass	10,050 00	11,168 39	1,108 13	319 83	82 75	555 25
Charlevoix	2,009 55	2,714 98	1,422 69	10 49	115 75	174 00
Cheboygan	11,083 89	11,492 65	1,085 22	29 50	51 00	78 32
Chippewa	5,870 00	5,954 00	4,762 71	86 75	----------	50 00
Clare	1,611 75	2,508 95	1,611 73	----------	66 00	98 00
Clinton	7,217 65	8,148 67	1,036 58	547 86	111 30	307 61
Crawford	650 00	808 34	415 54	----------	71 00	51 29
Delta	500 00	1,290 18	150 99	6 12	63 50	80 11
Eaton	33,253 00	34,249 44	702 04	729 15	110 75	395 35
Emmet	9,758 05	10,667 09	2,002 51	27 40	81 25	94 37
Genesee	86,584 00	87,646 11	1,043 30	1,930 04	109 00	518 99
Gladwin	850 00	1,424 50	4,520 51	----------	18 75	40 75
G'd Traverse	5,347 00	5,747 92	1,022 29	115 70	61 00	108 09
Gratiot	18,432 50	18,725 21	1,818 58	134 06	133 56	201 00
Hillsdale	15,760 00	18,587 08	1,612 43	867 02	159 25	443 46
Houghton	15,000 00	15,000 00	588 58	4 50	66 00	190 00
Huron	5,024 25	6,128 20	1,882 07	42 09	191 00	304 71
Ingham	64,066 54	65,315 21	1,295 95	825 95	110 25	516 55
Ionia	21,097 91	21,982 86	1,258 17	1,510 66	114 00	558 95
Iosco	16,542 04	17,299 93	3,228 61	5 50	68 00	62 00
Isabella	3,104 64	4,144 28	5,068 42	37 00	120 50	255 48
Isle Royal	----------	----------	----------	----------	----------	----------
Jackson	18,158 84	20,161 82	1,188 23	1,425 47	130 50	598 35
Kalamazoo	7,905 30	8,493 19	797 64	1,655 86	103 25	400 25
Kalkaska	1,590 00	2,479 18	1,331 99	9 00	114 85	136 35
Kent	94,506 00	99,439 50	1,641 72	1,624 90	193 00	750 38
Keweenaw	----------	43 50	----------	----------	51 00	98 50
Lake	1,920 00	3,198 33	2,609 45	1 00	73 75	267 74
Lapeer	6,750 75	9,827 65	4,131 05	751 94	146 75	307 87
Leelanaw	1,437 00	1,827 56	219 92	19 32	51 00	164 77
Lenawee	46,397 30	49,037 86	2,479 91	1,447 05	210 25	852 76
Livingston	19,306 66	20,480 98	1,024 94	368 85	122 75	319 06
Mackinac	242 00	609 01	1,420 00	----------	45 50	28 50
Macomb	2,153 00	2,476 10	472 55	910 50	91 00	444 31
Manistee	4,821 00	5,550 53	2,468 72	41 62	64 50	84 35
Manitou	----------	43 82	47 00	11 00	14 00	35 00
Marquette	53,768 00	55,424 39	1,717 13	----------	180 00	191 00
Mason	9,666 00	10,022 68	682 37	68 00	82 75	133 30
Mecosta	1,737 00	3,583 45	2,196 71	10 50	105 00	225 00
Menominee	2,225 00	2,582 27	178 01	----------	75 20	29 00
Midland	14,644 00	17,466 38	8,162 61	61 06	133 90	251 87
Missaukee	341 00	1,804 63	1,478 56	1 50	77 25	119 56
Monroe	5,977 56	6,594 48	2,639 28	447 60	95 25	449 84
Montcalm	12,189 49	13,659 11	6,066 02	469 96	264 25	389 30
Muskegon	42,726 45	43,846 97	1,947 34	77 85	163 25	317 50
Newaygo	9,321 05	10,172 23	2,632 90	54 45	155 00	282 60
Oakland	29,064 60	30,078 88	1,621 57	2,417 63	217 25	583 23
Oceana	1,014 00	1,568 16	1,456 66	66 44	132 25	278 94
Ogemaw	320 00	1,957 06	4,565 29	----------	61 75	46 25

TABLE VIII.—*Continued.*

Counties.	Bonded Indebtedness of the Districts.	Total Indebtedness of the Districts.	Amount due the Districts.	Amount Received by the Districts for non-resident Tuition.	Amount Paid and due Inspectors for Services.	Amount Paid and due Township Sup'ts for Services.
Ontonagon	----------	----------	$1,412 00	----------	$19 00	$40 00
Osceola	$10,130 00	$11,209 91	1,662 07	$30 72	153 80	319 69
Otsego	2,026 58	2,782 94	386 55	1 25	56 10	59 90
Ottawa	28,749 70	30,979 10	1,856 36	148 33	138 00	462 55
Presque Isle	4,431 00	8,891 45	682 84	----------	100 50	42 50
Roscommon	----------	----------	----------	----------	----------	----------
Saginaw	27,530 00	41,057 63	5,757 19	372 95	237 00	434 49
St. Clair	43,807 29	44,792 43	1,098 25	298 24	147 00	498 46
St. Joseph	23,579 10	24,207 86	1,328 12	1,510 01	135 00	444 90
Sanilac	4,042 00	4,797 49	3,078 49	31 37	214 86	340 85
Schoolcraft	6,000 00	7,115 80	3,112 13	----------	15 95	31 50
Shiawassee	41,657 79	42,828 02	714 73	438 90	141 50	500 70
Tuscola	9,246 00	10,185 53	1,336 90	224 30	112 91	383 76
Van Buren	22,718 00	23,174 33	1,393 75	1,200 54	181 31	491 71
Washtenaw	25,843 26	28,536 11	1,629 20	5,003 49	112 75	439 08
Wayne	21,804 04	22,537 96	6,054 53	1,276 68	189 00	480 80
Wexford	3,483 25	5,493 58	715 65	37 47	104 25	234 06
Totals	$1,293,451 55	$1,339,525 65	$149,705 06	$34,925 68	$8,205 98	$21,068 78

TABLE IX.

Township and District[a] Libraries, as Reported by School Inspectors for the Year ending September 6, 1880.

Counties.	District Libraries.[a]				Township Libraries.					Amount of fines, etc., Apportioned by Co. Treasurers April, 1880.[a b]
	No. of Libraries.	No. of Volumes added during Year.	Whole No. of Volumes in Libraries.	Paid for Support of Libraries.	No. of Libraries.	No. of Volumes added during Year.	Whole No. of Volumes in Libraries.	Paid for Support of Libraries.	Amount of Taxes voted for Libraries.	
Alcona	----------	----------	----------	----------	2	210	1,081	$176 00	$50 00	$522 00
Allegan	56	269	2,899	$382 98	5	112	1,334	184 90	----------	449 40
Alpena	2	----------	181	18 00	3	5	216	18 00	----------	91 84
Antrim	7	58	102	----------	10	7	1,725	57 00	25 00	73 05
Baraga	3	72	216	73 31	2	7	181	----------	----------	d 3 00
Barry	17	88	431	40 40	4	----------	1,229	10 00	----------	457 84
Bay	19	214	870	113 80	5	60	751	57 44	----------	220 86
Benzie	5	----------	144	----------	10	26	726	67 12	12 16	39 96
Berrien	46	14	1,717	37 75	5	75	2,623	78 53	50 00	495 35
Branch	32	214	953	160 55	3	79	1,236	186 41	200 00	191 96
Calhoun	51	29	1,992	28 28	1	----------	213	----------	----------	221 65
Cass	63	443	2,971	448 37	2	20	1,493	34 64	----------	502 57
Charlevoix	----------	----------	----------	----------	4	33	420	5 25	----------	d 20
Cheboygan	1	7	9	----------	4	1	510	----------	----------	----------
Chippewa	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
Clare	----------	----------	----------	----------	4	102	302	68 00	50 00	30 00
Clinton	13	2	299	43 85	2	----------	153	2 85	----------	394 72
Crawford	----------	----------	----------	----------	1	17	17	19 07	----------	----------
Delta	----------	----------	----------	----------	4	24	688	25 90	----------	---[c]---
Eaton	4	55	147	----------	6	319	2,277	314 22	----------	293 00
Emmet	3	21	22	5 00	3	53	109	60 80	----------	109 61
Genesee	35	104	1,147	128 20	1	46	202	56 42	----------	831 63
Gladwin	----------	----------	----------	----------	1	----------	190	50 00	----------	----------
G'd Traverse	8	----------	283	2 00	8	4	1,016	12 00	145 58	----------
Gratiot	9	79	588	71 89	1	----------	64	----------	----------	101 13

TABLE IX.—*Continued.*

Counties.	District Libraries. [a]				Township Libraries.					Amount of fines, etc., Apportioned by Co. Treasurers April, 1880. [a] [b]
	No. of Libraries.	No. of Volumes added during Year.	Whole No. of Volumes in Libraries.	Paid for Support of Libraries.	No. of Libraries.	No. of Volumes added during Year.	Whole No. of Volumes in Libraries.	Paid for Support of Libraries.	Amount of Taxes voted for Libraries.	
Hillsdale	50	8	1,326	$13 85	2	50	344	.....	.....	$472 60
Houghton	4	191	805	222 46	4	252	2,079	$377 17	$100 00	187 92
Huron	8	98	229	74 68	8	141	1,329	179 00	.....	237 06
Ingham	9	1	226	2 95	.....	.....	.....	.....	.....	287 89
Ionia	5	20	134	96 11	1	.....	95	.....	.....	327 29
Iosco	1	.....	16	.....	4	90	438	94 85	.....	249 77
Isabella	6	.....	176	7 00	2	5	65	.....	.....	561 38
Isle Royal	.....	.....	.....	.....	.....	.....	.....	.....	.....	..... [c] .....
Jackson	29	239	1,618	169 90	2	25	651	32 38	.....	796 51
Kalamazoo	75	144	3,577	265 05	1	50	560	47 06	.....	275 04
Kalkaska	10	.....	477	30 92	1	.....	134	.....	.....	234 28
Kent	22	483	954	246 65	6	260	1,990	417 34	.....	681 73
Keweenaw	3	112	1,328	287 13	3	106	1,301	110 44	.....	170 00
Lake	2	3	41	.....	7	77	472	53 93	165 00	50 00
Lapeer	18	67	576	214 63	6	107	1,169	120 91	.....	590 31
Leelanaw	1	7	7	.....	10	123	2,308	71 50	.....	66 00
Lenawee	92	471	5,787	556 00	8	321	7,892	421 76	.....	983 42
Livingston	10	.....	372	9 50	3	9	1,906	35 00	.....	162 49
Mackinac	.....	.....	.....	.....	4	.....	1,099	.....	45 00	.....
Macomb	20	140	1,345	106 28	3	22	561	341 00	.....	333 32
Manistee	14	110	751	99 31	6	48	980	54 83	3 71	71 47
Manitou	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 16
Marquette	4	57	1,293	352 60	6	25	801	186 00	.....	281 38
Mason	4	33	412	16 90	10	165	1,695	163 51	10 00	[d] 25 68
Mecosta	9	.....	236	20 00	3	157	226	178 35	.....	131 51
Menominee	.....	.....	.....	.....	2	.....	1,419	.....	100 00	131 00
Midland	7	90	880	182 75	6	195	400	230 48	.....	196 60
Missaukee	.....	.....	.....	.....	4	6	245	25 00	100 00	30 00
Monroe	9	46	282	19 14	10	24	2,896	78 00	.....	59 57
Montcalm	15	6	479	57 21	3	187	294	181 38	.....	496 94
Muskegon	2	.....	45	.....	12	409	1,938	984 89	.....	414 16
Newaygo	13	39	526	50 00	8	49	790	80 84	.....	264 66
Oakland	34	166	1,537	119 05	3	311	1,571	328 00	.....	1,734 08
Oceana	5	50	237	95 39	11	390	1,737	303 77	130 00	68 00
Ogemaw	.....	.....	.....	.....	1	3	46	.....	.....	..... [c] .....
Ontonagon	5	24	1,455	30 41	1	.....	412	.....	.....	[d] 270 00
Osceola	1	1	41	.....	6	76	1,298	244 81	88 00	36 20
Otsego	.....	.....	.....	.....	5	86	706	215 79	.....	..... [c] .....
Ottawa	18	77	680	93 20	7	46	1,489	84 68	.....	203 84
Presque Isle	5	42	109	6 70	.....	.....	.....	.....	.....	..... [c] .....
Roscommon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saginaw	49	503	3,330	526 42	11	304	3,257	399 62	.....	253 55
St. Clair	37	21	1,144	23 30	8	101	1,955	76 81	.....	176 09
St. Joseph	43	210	3,177	315 03	3	84	1,155	212 53	.....	573 16
Sanilac	24	3	906	3 13	8	70	1,107	137 87	.....	.....
Schoolcraft	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shiawassee	13	13	248	62 94	1	3	80	4 00	.....	410 90
Tuscola	25	25	890	22 99	7	15	794	37 40	.....	478 72
Van Buren	25	35	805	90 51	7	355	2,007	568 86	.....	244 40
Washtenaw	11	204	519	233 40	6	47	2,092	54 34	.....	393 93
Wayne	116	1,165	22,393	1,297 10	4	205	3,943	391 61	.....	1,308 31
Wexford	3	9	67	.....	9	51	613	94 45	25 00	[d] 11 99
Totals	1,230	6,532	76,997	$7,529 87	334	6,250	79,095	$9,104 71	$1,299 45	$20,000 47

[a] Not including cities having special charters, for which see Table X. [b] As reported by County Treasurers. [c] Not reported. [d] Not apportioned, but remaining in County Treasury.

TABLE X.

City School District Libraries, as reported by Boards of Education for School Year ending September 6, 1880.

Cities.	No. of Vols. added to Libraries during Year.	Whole No. of Vols. in Libraries.	Paid for Support of Libraries.	Amount of Taxes voted for Libraries.	Amount of fines, etc., Apportioned by County Treasurers. [b]
Adrian	94	3,274	$321 56		$179 85
Alpena		1,700	75 00	$200 00	193 96
Ann Arbor	45	790	81 85		111 15
Battle Creek	323	3,690	340 30		56 11
Bay City	717	7,600		1,200 00	334 00
Big Rapids	16	16			36 47
Cadillac					
Charlotte		175			26 50
Coldwater	25	1,190	47 29		33 94
Corunna	298	465	406 64		33 00
Detroit	1,258	40,332	8,025 52		3,405 13
Dowagiac	40	440	129 38		44 93
East Saginaw	56	4,765	702 76	500 00	144 36
Flint	508	1,836	669 07	500 00	218 21
Grand Haven	80	710	134 84	200 00	34 84
Grand Rapids	986	10,362	4,365 65	2,800 00	513 80
Greenville	12	141	9 60		53 98
Hastings		332			42 75
Hillsdale		25			52 51
Holland					20 58
Ishpeming					183 66
Ionia	27	274	32 73		42 93
Jackson, No. 1	8	1,280	22 50		234 99
Jackson, No. 17	25	225	50 00		192 60
Kalamazoo [a]	543	7,900	538 57		116 60
Lansing	159	926	155 87	100 00	89 23
Lapeer	35	113	96 00	56 60	54 60
Ludington	13	213			
Manistee		1,300	117 21		78 53
Marquette		1,200			151 57
Marshall	1	400	6 00		36 46
Mason	105	180	50 00		21 18
Monroe	500	2,000	504 97		10 43
Mount Clemens	187	707	189 70		31 46
Muskegon	13	1,978	387 20	240 00	319 32
Negaunee	100	1,200		250 00	159 39
Niles	4	559	32 50		72 24
Owosso	17	164	20 43		47 95
Pontiac	250	550	248 55		186 40
Port Huron		717	233 38		42 05
Saginaw	350	2,607	415 01	200 00	77 09
St. Clair		339			9 23
West Bay City	25	1,811	345 39		139 25
Wyandotte		900	59 85		108 43
Ypsilanti	56	465	13 75		70 33
Totals	6,876	105,901	$18,848 87	$6,246 60	$8,012 04

[a] Not an incorporated city, but as it ranks among the first in population it is included here.
[b] As reported by county treasurers.

TABLE XI.

Miscellaneous Items, as Reported by School Inspectors for the Year ending Sept. 6, 1880.

Counties.	Private and Select Schools.				Miscellaneous.			
	No. of Private or Select Schools.	No. of Teachers Employed in Private or Select Schools.		Estimated No. of Pupils attending Private or Select Schools.	Number Districts having a Dictionary.	Number Districts having a Globe.	Number Districts having Maps.	Number Districts in which U. S. History is taught.
		Men.	Women.					
Alcona	------	------	------	----------	8	8	8	11
Allegan	4	1	2	100	65	32	47	113
Alpena	4	2	2	400	4	------	5	6
Antrim	1	------	1	16	7	12	16	10
Baraga	4	------	1	50	2	2	2	2
Barry	5	4	3	165	80	8	13	82
Bay	5	2	6	308	22	26	39	41
Benzie	1	------	------	----------	8	7	7	14
Berrien	4	2	2	120	85	35	40	112
Branch	------	------	------	----------	54	17	22	22
Calhoun	3	3	8	405	101	16	29	103
Cass	1	1	------	17	72	17	24	25
Charlevoix	------	------	------	----------	3	1	4	11
Cheboygan	1	------	1	20	--------	--------	--------	--------
Chippewa	2	------	2	50	--------	--------	--------	--------
Clare	------	------	------	----------	3	2	2	3
Clinton	3	2	1	65	69	14	19	91
Crawford	------	------	------	----------	--------	1	2	3
Delta	------	------	------	----------	6	5	7	13
Eaton	5	3	2	140	52	10	17	124
Emmet	1	------	1	3	5	3	3	11
Genesee	1	------	5	300	107	20	62	124
Gladwin	------	------	------	----------	--------	--------	--------	--------
Grand Traverse	------	------	------	----------	12	15	18	21
Gratiot	1	1	------	24	30	8	24	31
Hillsdale	2	------	3	35	87	21	29	113
Houghton	5	2	10	590	8	5	6	1
Huron	5	4	2	291	15	13	36	32
Ingham	6	1	5	240	57	15	18	21
Ionia	4	1	4	180	60	15	28	70
Iosco	1	1	2	90	4	3	9	11
Isabella	4	------	4	134	19	11	13	31
Isle Royal	------	------	------	----------	--------	--------	--------	--------
Jackson	5	2	7	535	93	39	79	102
Kalamazoo	5	1	4	236	78	25	24	91
Kalkaska	------	------	------	----------	9	2	10	21
Kent	4	2	2	132	106	34	69	123
Keweenaw	1	1	------	4	6	9	8	11
Lake	------	------	------	----------	10	7	10	11
Lapeer	1	------	1	8	46	18	31	31
Leelanaw	------	------	------	----------	11	4	14	11
Lenawee	12	7	5	615	107	30	55	130
Livingston	1	1	------	15	34	9	23	23
Mackinac	------	------	------	----------	1	1	2	6
Macomb	15	10	6	895	57	16	45	84
Manistee	4	2	3	312	18	10	15	21
Manitou	------	------	------	----------	--------	1	--------	1
Marquette	2	2	------	125	10	13	13	13
Mason	------	------	------	----------	16	14	11	22
Mecosta	5	1	5	89	13	16	18	33
Menominee	------	------	------	----------	7	5	7	8
Midland	------	------	------	----------	9	6	11	12
Missaukee	------	------	------	----------	5	2	10	13
Monroe	22	11	25	1,335	28	12	25	70
Montcalm	2	1	1	20	42	29	42	72

TABLE XI.—*Continued.*

Counties.	Private and Select Schools.				Miscellaneous.			
	No. of Private or Select Schools.	No. of Teachers Employed in Private or Select Schools.		Estimated No. of Pupils attending Private or Select Schools.	Number Districts having a Dictionary.	Number Districts having a Globe.	Number Districts having Maps.	Number Districts in which U. S. History is taught.
		Men.	Women.					
Muskegon	4	3	11	421	27	23	29	48
Newaygo	------	------	------	----------	31	22	26	59
Oakland	------	------	------	----------	101	20	41	145
Oceana	------	------	------	----------	39	29	23	53
Ogemaw	------	------	------	----------	--------	--------	--------	--------
Ontonagon	------	------	------	----------	6	5	5	5
Osceola	1	2	------	20	19	15	14	37
Otsego	1	1	------	15	3	1	3	11
Ottawa	4	4	-----	176	60	26	53	72
Presque Isle	1	1	------	19	1	--------	4	2
Roscommon	------	------	------	----------	--------	--------	--------	--------
Saginaw	18	12	15	1,388	48	37	57	79
St. Clair	9	7	4	640	44	18	39	118
St. Joseph	2	1	1	37	65	23	20	74
Sanilac	------	------	------	----------	27	18	23	91
Schoolcraft	------	------	------	----------	--------	--------	--------	--------
Shiawassee	1	------	1	26	35	15	19	78
Tuscola	4	1	3	69	28	10	19	82
Van Buren	9	5	12	418	70	28	36	105
Washtenaw	8	7	5	630	68	24	43	88
Wayne	48	106	302	6,916	66	32	53	93
Wexford	2	------	2	15	19	13	15	20
Totals	264	221	482	18,854	2,508	998	1,503	4,007

TABLE XII.

Special Statistics of Boards of Education of Incorporated Cities, as Reported by Clerks of such Boards, for the Year ending September 6, 1880.

Cities.	No. of meetings of Board during Year.	Amount paid and due Officers of Board for Services.	Amount paid and due Members of Board for Attendance at meetings of Board.	Salary of Superintendent for School Year 1879–80.	Salary of Superintendent for School Year 1880–1.
Adrian	14	$100 00	----------	$1,600 00	$1,600 00
Alpena	12	----------	----------	1,100 00	1,100 00
Ann Arbor	13	100 00	----------	1,800 00	1,800 00
Battle Creek	30	50 00	----------	1,200 00	1,500 00
Bay City	14	----------	----------	1,700 00	1,700 00
Big Rapids	21	150 00	----------	1,000 00	1,000 00
Cadillac	18	100 00	----------	800 00	1,000 00
Charlotte	20	150 00	----------	1,000 00	1,000 00
Coldwater	17	158 33	----------	1,100 00	1,200 00
Corunna	15	100 00	----------	1,000 00	1,000 00
Detroit	28	2,000 00	----------	3,300 00	3,300 00
Dowagiac	17	135 00	----------	900 00	900 00
East Saginaw	23	850 00	----------	2,200 00	2,200 00
Flint	28	300 00	----------	1,500 00	1,200 00
Grand Haven	10	----------	----------	1,200 00	1,200 00
Grand Rapids	18	800 00	----------	2,000 00	2,000 00
Greenville	8	50 00	----------	1,400 00	1,400 00
Hastings	13	40 00	----------	700 00	800 00
Hillsdale	7	50 00	----------	1,000 00	1,000 00

TABLE XII.—*Continued.*

Cities.	No. of Meetings of Board during year.	Amount paid and due Officers of Board for Services.	Amount paid and due Members of Board for Attendance at meetings of Board.	Salary of Superintendent for School Year 1879–80.	Salary of Superintendent for School Year 1880–1.
Holland	32	50 00	----------	700 00	700 00
Ishpeming	8	----------	----------	1,800 00	1,800 00
Ionia	12	----------	----------	1,400 00	1,400 00
Jackson, No. 1	34	150 00	----------	1,700 00	1,700 00
Jackson, No. 17	12	300 00	----------	1,100 00	1,200 00
Kalamazoo [a]	35	250 00	----------	1,145 12	1,800 00
Lansing	25	200 00	451 00	1,000 00	1,200 00
Lapeer	19	75 00	----------	1,200 00	1,200 00
Ludington	6	100 00	----------	1,000 00	1,000 00
Manistee	22	----------	----------	1,400 00	1,500 00
Marquette	5	100 00	----------	1,300 00	1,500 00
Marshall	18	125 00	----------	1,331 00	1,200 00
Mason	18	50 00	----------	860 00	900 00
Monroe	15	25 00	----------	1,200 00	1,000 00
Mt. Clemens	10	50 00	----------	1,100 00	1,000 00
Muskegon	23	----------	----------	1,200 00	1,350 00
Negaunee	3	32 00	----------	1,450 00	1,450 00
Niles	29	250 00	----------	1,200 00	1,000 00
Owosso	13	100 00	----------	1,000 00	1,000 00
Pontiac	6	----------	----------	1,500 00	1,500 00
Port Huron	27	----------	----------	1,000 00	1,200 00
Saginaw	20	200 00	----------	1,600 00	1,600 00
St. Clair	12	----------	----------	800 00	900 00
Wyandotte	16	50 00	----------	600 00	700 00
Ypsilanti	13	100 00	----------	1,200 00	1,200 00

[a] Not an incorporated city, but as it ranks among the first in population, it is included here.

TABLE XIII.

Statistics Reported by Township Superintendents for the Official Year ending April 5, 1880.

Counties.	No. of Superintendents Reporting.	No. of Superintendents not Reporting.	No. of Districts having uniform lists of text books.	No. of Districts having prescribed courses of study.	No. schools that are properly classified.	No. districts not changing teachers during yr.	No. districts requiring Teachers to "board around."	No. of Regular Examinations held during year.	No. of Special Examinations held during year.	No. of applicants examined.	No. of 1st Grade Certificates issued.	No. of 2d Grade Certificates issued.	No. of 3d Grade Certificates issued.	No. of teachers holding Normal School Certificates.	Total amount received by Township Superintendents during year.
Alcona	2	2	5	5	5	5	------	2	20	17	3	5	8	1	$82 50
Allegan	24	----	77	12	63	27	50	56	178	438	33	71	290	10	864 63
Alpena	3	1	3	10	10	7	------	5	2	19	----	11	5	------	97 00
Antrim	13	----	23	7	11	17	3	27	45	87	8	16	52	1	241 18
Baraga	3	1	5	2	3	4	------	2	4	13	----	3	9	1	36 00
Barry	15	1	73	15	39	13	98	39	110	306	21	71	212	6	562 94
Bay	15	3	27	6	22	20	------	13	74	93	9	25	41	2	402 18
Benzie	10	2	4	------	3	7	1	6	23	33	2	12	21	1	96 97
Berrien	19	1	53	15	35	28	17	37	101	309	43	99	152	4	564 77
Branch	13	3	50	5	35	4	74	30	74	234	24	52	140	3	465 53
Calhoun	18	2	77	3	30	7	68	41	121	288	18	71	221	7	627 49
Cass	14	1	67	7	37	11	22	30	106	247	19	64	137	3	579 31
Charlevoix	11	2	17	7	13	8	1	21	42	76	4	20	48	------	193 44
Cheboygan	7	2	14	8	13	9	------	6	30	41	9	12	16	------	117 75
Chippewa	1	2	1	4	1	1	1	3	5	16	1	5	6	------	60 00
Clare	7	1	5	1	3	8	------	7	21	37	3	8	19	------	134 43
Clinton	15	1	54	13	20	11	61	41	92	271	26	84	149	5	527 59
Crawford	5	----	3	1	1	4	------	7	8	20	----	5	14	------	97 00
Delta	6	3	3	2	2	8	------	5	11	14	----	5	11	------	71 00
Eaton	15	1	60	15	19	10	80	37	145	270	21	39	220	2	648 84

TABLE XIII.—*Continued.*

unties.	No. of Superintendents Reporting.	No. of Superintendents not Reporting.	No. of Districts having uniform lists of text books.	No. of Districts having prescribed courses of study.	No. Schools that are properly classified.	No. districts not changing teachers during y'r.	No. districts requiring Teachers to "board around."	No. of Regular Examinations held during year.	No. of Special Examinations held during year.	No. of applicants examined.	No. of 1st Grade Certificates issued.	No. of 2d Grade Certificates issued.	No. of 3d Grade Certificates issued.	No. of teachers holding Normal School Certificates.	Total amount received by Township Superintendents during year.
iet	10	----	1	10	3	15	6	17	24	58	6	14	29	------	154 85
isee	18	----	76	29	52	12	66	44	115	348	24	64	245	1	816 62
win	3	----	------	------	----	2	------	1	12	13	----	3	9	------	47 50
raverse	10	----	18	2	13	8	3	18	59	108	11	27	55	3	251 24
iot	14	2	33	4	12	5	24	31	81	182	22	72	92	4	528 97
dale	17	1	34	12	28	11	108	44	89	369	30	101	202	5	652 47
hton	5	2	9	6	7	6	3	7	9	55	19	17	20	11	167 50
n	20	5	40	20	26	28	------	18	72	98	18	51	28	2	381 69
am	16	----	58	11	42	19	97	52	106	329	13	36	239	9	692 33
....	14	2	51	16	23	16	92	31	95	290	18	47	184	4	549 23
.....	7	4	2	4	4	4	------	6	10	15	1	10	4	3	34 25
lla	15	1	39	8	26	16	3	26	74	124	18	32	69	3	393 99
son	16	3	39	16	34	18	91	39	80	280	10	38	192	16	707 92
mazoo	16	----	80	18	41	10	67	36	94	292	20	50	199	6	542 80
aska	9	----	16	8	11	6	------	16	25	59	9	24	16	------	208 48
.....	21	3	63	22	55	19	51	47	206	391	33	101	216	4	899 63
enaw	5	2	4	4	5	3	------	5	6	13	6	3	5	1	70 50
.....	11	1	13	------	5	10	------	16	40	72	2	17	42	------	217 83
er	15	3	49	17	37	19	38	34	106	252	9	52	171	5	495 07
naw	10	----	14	6	4	5	2	18	59	88	3	30	45	------	244 05
wee	20	2	42	8	30	29	89	54	138	373	41	115	189	9	910 00
gston	15	1	32	3	25	10	103	32	74	259	21	25	193	10	699 28
inac	5	----	6	2	5	4	------	2	5	9	3	4	2	------	42 25
mb	12	2	38	14	32	25	10	32	51	179	23	45	107	4	516 96
stee	7	3	14	6	9	5	------	6	12	27	6	8	13	1	69 30
ton	3	----	2	2	2	2	------	7	------	4	----	1	2	------	27 50
uette	8	3	4	1	7	15	1	8	14	19	3	7	18	2	93 50
n	11	2	17	2	9	15	------	13	31	67	10	24	32	2	192 55
sta	14	2	38	5	12	13	------	28	65	106	7	41	59	1	280 61
minee	2	5	------	------	----	1	------	2	8	16	----	6	10	------	83 30
nd	10	3	15	4	8	3	------	10	38	58	2	18	35	1	209 00
ukee	8	----	4	3	3	11	------	9	33	45	4	13	23	------	153 29
oe	13	2	24	14	32	28	17	28	113	205	24	71	92	5	510 76
calm	17	3	53	11	25	19	23	32	105	175	11	65	90	5	537 00
egon	13	3	24	7	13	14	15	3	21	65	130	9	45	7	311 48
ygo	15	1	47	12	24	11	11	28	65	129	14	43	56	5	$410 00
nd	24	1	63	20	59	25	121	57	129	412	29	116	249	8	954 33
ia	15	1	26	4	11	14	2	33	76	140	5	50	70	------	356 31
aw	2	4	1	------	----	1	1	------	8	8	1	2	5	------	35 25
iagon	3	1	1	2	2	6	------	3	5	14	3	7	5	2	65 00
la	16	----	43	12	21	14	------	25	82	136	9	35	82	2	397 08
o	5	2	8	2	2	10	------	11	18	29	3	13	14	------	91 80
a	13	2	64	11	27	19	5	23	79	186	24	48	89	4	511 16
ue Isle	4	2	1	4	4	2	------	5	3	6	----	2	5	------	63 00
mmon	3	1	2	2	2	----	2	------	9	9	1	5	3	------	24 00
aw	24	2	52	16	43	38	1	34	127	207	17	49	119	2	590 99
air	20	3	80	28	39	31	1	42	130	311	18	65	173	2	742 90
seph	16	----	77	13	49	18	56	34	83	197	19	89	169	8	584 55
c	22	3	40	20	29	24	-----	33	96	207	6	77	92	1	571 08
lcraft	3	----	2	------	----	2	1	2	3	4	----	------	4	------	85 00
assee	14	2	42	15	21	11	64	35	99	225	7	16	183	2	555 00
la	20	4	41	10	23	20	2	43	82	196	16	29	129	3	514 38
uren	17	1	79	21	34	15	42	34	125	338	33	58	200	4	551 69
tenaw	19	1	36	12	24	17	74	41	93	269	19	59	198	23	782 68
e	15	3	41	18	33	24	8	38	81	219	26	71	121	23	588 52
ord	15	1	25	7	15	12	1	24	70	90	3	26	58	------	289 62
ils	911	124	2,344	662	1,467	947	1,760	1,748	4,789	11,368	983	2,815	6,770	259	$27,928 75

TABLE XIV.

Graded School Statistics, Compiled from School Inspectors' Reports for the Year ending September 6, 1880.

Districts.	Counties.	No. of Children between 5 and 20 years	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Ada	Kent	158	$7,000	$494 00	$39 46	$22 00	$1,396 23	$4,100 00
Addison	Lenawee	107	2,000	680 00	55 56	20 00	713 10	
Adrian	Lenawee	2,122	104,000	12,198 20	108 57	35 95	32,122 00	20,400 00
Alaska	Kent	136	2,000	387 80	35 63	14 69	534 26	800 00
Albion	Calhoun	763	45,000	4,767 50	115 79	29 22	10,713 97	14,800 00
Algonac	St. Clair	330	8,000	1,305 00	95 00	50 00	1,865 65	
Allegan	Allegan	696	20,000	3,860 00	80 00	30 29	5,450 85	
Allen	Hillsdale	132	12,000	684 00	45 00	20 42	2,657 42	7,500 00
Alma	Gratiot	210	5,000	980 00	37 00	24 00	1,563 61	3,070 00
Almont	Lapeer	325	15,000	2,050 00	59 41	31 52	2,977 48	
Alpena	Alpena	1,363	22,000	5,777 00	70 00	40 47	7,916 23	
Amadore	Sanilac	80	800	270 00	30 00		344 62	
Ann Arbor	Washtenaw	2,676	140,500	17,650 70	111 54	39 76	35,328 06	14,000 00
Armada	Macomb	209	6,000	1,078 00	62 22	19 02	1,451 01	
Athens	Calhoun	152	3,500	914 00	60 00	41 00	1,094 96	
Atlantic Mine	Houghton	296	3,700	1,750 00	60 00	38 33	2,463 68	
Attica	Lapeer	277	2,000	850 00	50 00	22 24	1,138 24	
Augusta	Kalamazoo	230	1,000	1,218 00	42 50	21 57	1,411 33	
Au Sable	Iosco	372	3,500	1,095 00	50 00	35 00	1,601 92	2,500 00
Bancroft	Shiawassee	151	1,900	713 00	45 00	34 22	1,645 57	
Bangor Tp., No. 2, frl.	Van Buren	245	3,500	1,204 00	55 55	24 00	1,582 54	
Bangor Tp., No. 3, frl.	Van Buren	91	2,000	464 00	35 60	18 10	599 24	
Baraga	Baraga	188	1,500	879 00	48 50		948 00	
Bath	Clinton	134	3,500	515 00	39 29	21 82	1,217 13	2,000 00
Battle Creek	Calhoun	1,975	150,000	9,790 00	75 83	35 79	20,282 33	69,000 00
Bay City	Bay	5,411	145,000	18,564 55	164 44	37 04	31,079 60	20,000 00
Beacon	Marquette	420	3,700	2,200 00	100 00	60 00	4,146 35	
Belding	Ionia	205	600	615 00	43 33	25 00	1,722 73	1,000 00
Belleville	Wayne	168	5,000	1,000 00	50 77	20 00	1,277 21	
Bellevue	Eaton	294	200	1,200 00	60 00	28 00	1,976 06	
Benton Harbor	Berrien	500	15,000	2,762 00	94 44	38 24	9,634 23	
Berlin	Ottawa	128	500	585 00	40 00	25 00	695 75	
Berrien Springs	Berrien	274	5,500	1,170 00	55 00	25 00	2,052 11	
Big Rapids	Mecosta	912	10,000	4,740 00	80 00	31 40	7,105 23	
Birmingham	Oakland	280	15,000	1,840 00	45 33	24 00	2,572 31	
Blissfield, No. 1, frl.	Lenawee	211	5,000	1,160 00	60 00	27 00	1,317 44	2,400 00
Blissfield, No. 2, frl.	Lenawee	175	4,000	970 00	52 50	18 50	1,446 35	1,200 00
Bloomingdale	Van Buren	130	300	605 00	40 00	20 28	794 61	
Breedsville	Van Buren	118	1,200	525 00	45 00	20 00	565 63	
Bridgeport	Saginaw	137	3,500	612 00	40 00	28 00	720 99	
Brighton	Livingston	252	15,000	1,770 00	80 00	24 25	2,834 17	1,222 00
Bronson	Branch	316	4,000	1,552 00	77 77	23 86	3,900 71	1,000 00
Brooklyn	Jackson	181	12,000	1,350 00	70 00	28 26	1,785 12	
Buchanan	Berrien	640	20,000	2,798 80	69 28	26 00	7,587 61	20,000 00
Buena Vista Tp., No. 6	Saginaw	151	3,500	700 00	50 00	20 00	1,832 51	1,650 00
Burlington	Calhoun	129	2,000	597 00	38 00	18 43	723 01	
Burr Oak	St. Joseph	249	15,000	1,144 75	67 19	20 00	2,929 52	3,600 00
Byron	Shiawassee	120	5,000	910 00	65 00	26 00	980 37	
Cadillac	Wexford	505	9,000	2,200 00	80 00	35 00	5,423 35	3,275 00
Caledonia	Kent	185	1,600	670 00	46 00	21 00	1,409 57	
California	Branch	94	1,000	311 36	25 33	17 71	471 83	
Calumet	Houghton	1,671	50,500	14,722 50	82 14	46 90	20,887 38	
Cambria Mills	Hillsdale	112	5,000	532 00	45 45	26 23	1,163 26	
Cannonsburg	Kent	117	2,500	477 00	33 58	19 24	586 77	
Capac	St. Clair	232	10,000	1,000 00	50 00	25 00	4,127 47	6,000 00
Carleton	Monroe	187	2,500	435 50	30 00	18 00	735 36	16 00
Caro	Tuscola	415	4,000	1,821 60	129 65	38 18	3,106 39	4,000 00
Carrollton	Saginaw	236	2,000	850 00	40 00	22 50	1,326 95	
Carson City	Montcalm	279	2,000	1,640 00	52 62	24 00	1,478 75	
Caseville	Huron	201	5,000	1,020 00	70 00	32 00	1,139 75	

TABLE XIV.—*Continued.*

tricts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
/----------	Tuscola -----	136	$1,000	$536 20	$37 58	$22 00	$330 11	
is ----------	Cass ----------	254	15,000	1,952 00	88 88	32 00	3,788 14	$7,644 69
rings ------	Kent ----	362	20,000	2,120 00	100 00	28 00	4,878 98	12,000 00
dine -------	Keweenaw --	331	8,500	1,710 00	70 00	40 00	3,577 10	
lle ----------	St. Joseph ---	207	18,000	1,900 00	70 00	30 00	4,604 86	7,500 00
----------	Calhoun ----	97	1,000	414 75	35 00	22 75	487 50	
ix ----------	Charlevoix --	200	3,500	842 50	53 61	30 00	1,315 48	
s ----------	Eaton -------	802	25,000	6,238 27	------	44 56	7,849 04	4,000 00
an ----------	Cheboygan --	420	12,000	1,770 00	65 00	23 50	4,078 30	10,000 00
----------	Washtenaw -	377	15,000	2,320 00	80 00	25 33	4,658 19	948 65
ig ----------	Saginaw -----	301	12,000	1,540 00	84 85	33 94	2,517 07	7,000 00
ig Tp., No. 3	Berrien ------	120	400	180 00	------	25 00	234 15	
----------	Clare --------	146	1,800	684 00	51 00	25 00	772 65	
n ----------	Oakland -----	164	1,500	916 00	50 00	26 00	1,102 26	
----------	Lenawee ----	152	5,000	786 50	44 72	21 33	1,073 61	
----------	Keweenaw --	121	1,500	750 00	75 00	--------	902 59	
----------	Lenawee ----	257	6,000	1,947 00	77 50	29 30	2,475 57	
----------	Genesee -----	213	500	540 00	78 31	36 00	611 73	
er ----------	Branch ------	1,223	50,000	9,336 80	76 66	36 55	11,597 44	
----------	Berrien -----	156	1,200	416 95	35 00	26 88	509 64	
----------	St. Joseph ---	161	----------	646 00	40 00	22 88	885 97	
ce ----------	Oakland -----	82	700	350 00	33 75	20 00	425 84	
----------	Jackson -----	171	1,000	1,651 00	85 00	26 59	1,883 63	
line -------	St. Joseph ---	423	36,000	3,000 00	100 00	30 67	3,426 47	
rille -------	Ottawa ------	207	5,000	720 00	40 00	19 77	804 48	
----------	Montcalm ---	236	3,000	1,060 00	40 85	29 40	1,296 99	
----------	Shiawassee -	442	30,000	3,192 00	77 93	29 18	6,433 96	14,500 00
----------	Van Buren --	134	1,800	886 20	35 00	30 00	676 20	3 10
l ----------	Sanilac ------	190	800	523 00	45 00	16 86	731 96	
e ----------	Ingham. ----	153	4,000	1,440 00	60 00	28 00	1,596 93	
rg ----------	Oakland -----	85	1,200	456 20	34 17	13 27	521 81	
n ----------	Wayne ------	287	2,500	600 00	44 44	25 00	867 48	8 70
----------	Van Buren --	416	15,000	2,459 00	84 21	29 10	4,185 55	1,000 00
l ----------	Lenawee ----	809	6,000	1,126 00	61 11	21 33	2,336 82	1,610 00
----------	Wayne ------	39,467	747,690	148,777 75	120 00	55 92	208,885 78	
----------	Clinton ------	127	10,000	702 00	50 00	19 38	845 74	
----------	Washtenaw.	413	8,000	2,390 00	80 00	28 47	3,082 36	
ile ----------	Eaton -------	133	2,500	288 00	35 00	19 10	1,400 15	1,500 00
----------	Allegan. ----	208	5,000	890 00	60 00	25 00	1,220 46	
ic ----------	Cass ---------	510	15,000	3,310 00	54 33	29 17	4,251 51	135 00
----------	Ottawa ------	150	500	620 00	50 00	12 00	721 11	
----------	Lapeer ------	136	4,000	758 00	42 50	14 06	797 85	
----------	Monroe ------	351	3,000	1,250 00	60 00	21 67	1,459 13	
inaw -------	Saginaw -----	5,885	150,000	26,875 00	110 18	47 94	42,545 31	11,000 00
was ----------	Iosco ------	336	3,000	1,600 00	70 00	30 00	2,731 27	5,000 00
apids -------	Eaton. ------	473	32,000	2,550 00	80 00	29 17	5,532 73	25,000 00
----------	Wayne ------	201	3,900	540 00	45 00	15 00	1,121 26	250 00
----------	Montcalm ---	204	2,200	418 00	36 33	24 25	2,196 48	
sburg ------	Cass ---------	178	2,000	1,080 00	60 00	30 00	1,266 78	
ids ----------	Antrim ------	210	13,000	2,340 00	61 25	36 76	3,570 48	
ll ----------	Gratiot ------	123	800	617 50	40 00	25 00	878 85	
----------	Clinton ------	192	1,000	720 00	40 00	20 00	811 91	
----------	Monroe ------	179	1,800	555 00	30 00	20 83	618 99	
a ----------	Delta --------	735	7,000	3,924 50	100 00	37 02	6,105 12	700 00
lle ----------	Bay ----------	274	7,000	1,088 50	55 00	34 74	4,517 60	4,000 00
----------	Osceola. ----	325	5,535	1,600 00	64 86	36 03	6,162 96	3,169 00
ren ----------	St. Clair ----	320	1,600	379 00	35 00	16 09	428 56	
l ----------	Sanilac ------	140	1,000	260 00	40 00	20 00	303 86	
ton ----------	Oakland -----	150	400	945 00	66 50	14 00	979 52	
----------	Clare --------	198	3,300	556 00	40 00	36 00	1,744 11	
----------	Genesee -----	781	20,000	5,020 00	73 33	35 19	7,590 17	1,550 00
urg ----------	Ottawa ------	199	2,200	700 00	45 00	25 00	1,254 09	
e Centre ---	Allegan ------	158	1,000	468 00	------	26 00	691 75	
e Tp., No. 1	Allegan ------	172	2,000	568 00	35 00	20 00	769 31	375 00
k ----------	Wayne ------	210	14,000	891 00	52 63	20 57	2,236 56	

TABLE XIV.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Flint	Genesee	2,360	$127,000	$14,712 00	$91 27	$37 34	$33,513 76	$83,500
Flushing	Genesee	212	7,000	1,500 00	56 67	26 00	1,665 65	
Forestville	Sanilac	170	2,000	492 33	40 00	20 00	864 98	8
Forester	Sanilac	185	700	340 00	40 00	28 00	382 00	
Fort Gratiot	St. Clair	453	6,000	1,500 00	60 00	30 00	3,630 21	600
Fowlerville	Livingston	327	2,100	1,338 00	60 00	22 37	1,860 95	1,200
Frankfort	Benzie	239	3,000	1,370 00	73 00	32 00	1,600 69	
Franklin Tp., No. 1	Houghton	317	500	1,080 00	65 00	43 00	1,326 01	
Franklin Tp., No. 2	Houghton	262	3,000	1,700 00	60 00	50 00	2,323 24	
Franklin Tp., No. 5	Houghton	435	1,000	1,635 00	59 25	45 00	1,967 52	
Freeland	Saginaw	123	2,500	620 00	40 00	23 00	738 43	
Fremont Centre	Newaygo	303	8,000	1,450 00	55 00	30 00	3,344 09	4,000
Gaines	Genesee	154	500	640 00	40 00	24 00	649 86	
Galesburg	Kalamazoo	184	12,000	1,340 00	49 88	28 00	2,009 93	2
Galien	Berrien	188	5,500	691 00	55 00	27 82	1,429 59	1,200
Ganges	Allegan	107	2,600	368 00	35 00	15 80	180 75	
Gibraltar	Wayne	104	3,500	300 00	33 33		786 73	
Girard	Branch	73	1,200	377 00	38 50	17 33	475 15	
Gobleville	Van Buren	132	2,500	544 00	40 00	24 00	586 71	
Goodrich	Genesee	87	3,000	654 00	55 00	16 00	761 73	
Graafschap	Allegan	239	680	568 00	39 00	18 74	718 40	29
Grand Haven	Ottawa	1,113	35,000	7,117 20	120 00	38 78	16,669 75	11,000
Grand Ledge	Eaton	451	3,500	1,395 00	40 55	25 00	1,673 71	
Grand Rapids	Kent	9,874	352,000	47,095 10	121 05	42 10	79,052 33	56,000
Grand Rapids Tp. No. 1	Kent	272	4,500	872 00	50 00	23 44	5,902 11	4,500
Grandville	Kent	286	10,000	1,290 00	45 00	13 44	2,680 82	
Grass Lake	Jackson	238	9,000	1,605 00	84 61	26 66	2,054 51	113
Grattan	Kent	106	2,500	585 00	44 44	20 56	721 22	
Greenland Tp., No. 1	Ontonagon	109	1,000	1,050 00	75 00	30 00	1,395 24	
Greenland Tp., No. 2	Ontonagon	140		1,000 00	75 00	25 00	1,307 65	
Greenville	Montcalm	819	45,000	5,800 00	140 00	33 85	14,060 00	8,000
Grosse Isle	Wayne	201	3,000	930 00	40 00	22 08	1,101 21	
Hadley	Lapeer	140	3,000	878 00	75 33	22 22	1,114 88	
Hamtramck Tp., No. 5	Wayne	550	4,000	900 00	60 00	30 00	1,101 49	
Hancock	Houghton	1,076	32,000	4,200 00	95 00	45 00	14,649 04	15,000
Hanover	Jackson	133	8,000	1,350 00	80 00	25 00	2,921 69	
Harrisville	Alcona	215	6,500	1,205 00	70 00	50 50	1,721 56	
Hart	Oceana	176	3,500	970 00	66 43	28 06	1,277 60	
Hartford	Van Buren	304	6,000	1,212 00	60 00	26 88	1,351 72	
Hartland	Livingston	121	3,000	600 00	40 00	20 00	695 44	
Hastings	Barry	741	45,000	3,000 00	70 00	25 55	7,779 41	35,000
Hersey	Osceola	183	3,500	1,200 00	65 00	27 50	1,508 48	
Hesperia	Newaygo	187	500	335 00	40 00	20 00	2,028 06	2,750
Hillsdale	Hillsdale	951	40,000	4,659 90	122 98	30 63	7,193 00	1,243
Holland	Ottawa	911	20,000	3,461 25	41 25	23 96	16,312 64	12,743
Holland Tp., No. 1	Ottawa	125	1,000	247 50		25 39	305 20	
Holland Tp., No. 3	Ottawa	146	350	504 00	40 00	16 00	594 85	
Holly	Oakland	396	20,000	2,638 00	105 26	27 33	4,100 02	3,500
Holt	Ingham	137	2,500	390 00	28 36	18 92	461 35	
Homer	Calhoun	263	7,500	1,417 44	60 00	27 25	1,745 96	10
Houghton	Houghton	1,075	37,000	6,472 50	100 00	40 46	9,811 96	
Howard City	Montcalm	259	2,000	1,215 00	70 00	32 50	1,886 65	
Howell	Livingston	633	15,000	4,039 00	94 47	33 17	8,382 04	15,139
Hubbardston	Ionia	170	7,000	675 00	40 00	27 31	1,601 19	4,500
Hudson	Lenawee	415	15,000	2,920 00	67 47	21 96	3,263 58	
Hudson Tp., No. 5	Lenawee	250	2,500	1,442 00	70 00	29 33	1,554 51	
Ida	Monroe	164	1,500	392 00	33 00	16 00	472 02	
Imlay City	Lapeer	322	5,000	1,350 00	70 00	21 67	2,030 91	500
Ionia	Ionia	1,201	30,000	7,390 00	80 00	34 89	14,550 85	8,500
Ishpeming	Marquette	1,558	35,000	7,983 75	121 83	36 19	10,663 28	
Ithaca	Gratiot	282	1,600	1,375 50	78 40	20 07	1,605 49	
Jackson City, No. 1	Jackson	2,315	75,000	24,266 00	137 44	43 12	47,976 46	15,000
Jackson City, No. 17	Jackson	1,778	50,000	8,245 93	80 00	36 92	12,128 05	1,003
Jonesville	Hillsdale	458	40,000	2,760 00	65 59	34 34	3,975 26	
Kalamazoo	Kalamazoo	3,097	80,000	18,735 12	116 00	35 48	34,385 54	

TABLE XIV.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Kalkaska	Kalkaska	122	$3,000	$656 25	$42 38	$23 25	$1,578 89	$1,000 00
Keelerville	Van Buren	100	2,500	352 00	40 00	21 50	434 33	
Laingsburg	Shiawassee	208	1,000	1,000 00	50 00	25 00	1,056 04	
Lake Linden	Houghton	904	5,500	5,145 00	101 54	39 43	7,926 50	
Lakeside Tp., No. 3	Muskegon	210	1,800	670 00	------	26 80	1,760 34	296 39
Laketon	Muskegon	142	1,000	539 00	69 00	34 50	646 64	
Laketown Tp. No. 1, fri.	Allegan	145	400	424 00	40 00	22 40	480 32	
Lakeview	Montcalm	216	2,000	700 00	40 00	30 00	854 47	
Lamont	Ottawa	102	3,000	449 68	45 00	20 27	614 17	2 72
L'Anse	Baraga	397	2,500	2,401 25	60 00	40 04	2,937 29	
Lansing	Ingham	2,271	106,000	11,379 99	80 36	44 00	21,704 10	48,240 00
Lapeer	Lapeer	804	35,000	5,675 00	120 00	31 96	11,747 49	4,390 00
Lawrence	Van Buren	213	10,000	1,520 00	70 00	27 33	1,886 98	
Lawton	Van Buren	279	10,000	1,340 00	70 00	21 33	1,665 02	
Leland	Leelanaw	132	1,000	450 60	43 13	13 20	491 06	
Leslie	Ingham	381	15,000	1,600 00	67 50	21 14	1,820 74	
Lexington	Sanilac	341	3,000	1,180 00	50 00	22 67	1,451 42	
Linden	Genesee	169	1,000	1,000 00	50 00	25 00	1,180 91	
Lisbon	Ottawa	131	2,000	669 10	46 11	30 62	887 64	
Litchfield	Hillsdale	240	2,500	1,270 00	70 43	25 77	1,598 56	
Little Traverse	Emmet	264	3,750	607 50	40 00	27 50	1,638 42	3,209 69
Lowell	Kent	596	13,000	3,122 60	46 73	28 67	5,057 99	3,000 00
Ludington	Mason	1,110	18,000	4,663 75	55 50	39 49	11,061 96	7,025 20
Lyons	Ionia	251	4,000	1,320 00	52 00	30 00	1,508 11	
Mackinac	Mackinac	294	2,000	1,376 00	94 12	33 88	1,549 69	
Manchester	Washtenaw	384	25,000	3,140 00	62 50	32 00	4,949 17	
Manistee	Manistee	1,814	38,000	7,678 75	140 00	41 61	16,000 15	4,000 00
Maple Rapids	Clinton	224	4,000	1,026 00	40 00	24 46	1,386 63	
Marcellus	Cass	215	2,000	548 00	32 00	19 00	786 73	
Marine City	St. Clair	592	10,000	1,880 00	83 89	25 00	2,238 14	
Marlette	Sanilac	202	2,500	850 00	42 50	16 84	1,488 36	
Marquette	Marquette	1,828	75,000	5,187 00	144 44	30 85	15,770 18	50,310 80
Marshall	Calhoun	1,179	100,000	7,306 00	133 10	33 19	15,883 66	26,500 00
Marysville	St. Clair	142	2,000	454 50	30 83	18 63	489 94	
Mason	Ingham	586	20,000	3,000 00	86 00	30 50	4,340 00	
Mattawan	Van Buren	100	4,000	425 00	40 00	25 00	846 70	400 00
Memphis	Macomb	292	8,000	1,000 00	60 00	20 00	1,241 63	
Mendon	St. Joseph	265	12,000	1,860 00	50 40	28 00	3,830 06	5,700 00
Menominee	Menominee	825	4,000	3,003 00	140 00	26 72	3,708 14	
Metamora	Lapeer	122	3,500	791 03	63 89	26 51	1,687 31	
Michigamme	Marquette	375	6,000	1,560 60	75 00	40 50	4,367 59	2,400 00
Middleville	Barry	249	17,000	1,380 00	60 00	29 00	3,406 06	
Midland, No. 3	Midland	416	20,000	2,000 00	80 00	30 00	6,117 89	12,000 00
Midland, No. 6	Midland	126	2,000	529 50	45 00	24 00	733 07	
Milford	Oakland	366	6,000	1,980 00	52 00	25 41	3,288 53	2,354 47
Millington	Tuscola	210	700	576 00	40 00	24 00	704 77	
Monroe	Monroe	1,633	15,800	2,410 00	120 00	30 00	3,998 35	
Montague	Muskegon	418	16,000	1,982 50	80 00	30 32	5,630 64	10,300 00
Morenci	Lenawee	363	16,000	1,264 00	44 44	19 20	3,612 36	7,200 00
Morley	Mecosta	114	600	542 50	40 00	29 73	611 98	
Moscow	Hillsdale	86	1,000	410 00	33 20	14 75	509 81	
Mosherville	Hillsdale	65	3,000	542 64	44 44	23 00	648 17	
Mt. Clemens	Macomb	908	22,000	3,180 00	110 00	29 71	4,144 31	
Mt. Morris	Genesee	249	1,200	495 00	35 00	20 00	841 89	
Mt. Pleasant	Isabella	355	2,500	1,520 00	60 00	30 67	2,854 60	
Muir	Ionia	213	1,200	1,158 00	66 67	31 00	1,254 16	
Muskegon	Muskegon	3,807	81,308	12,991 50	92 31	37 84	26,646 81	20,000 00
Napoleon	Jackson	164	7,000	1,284 00	60 00	29 74	1,620 34	
Nashville	Barry	310	1,500	1,250 00	45 00	26 66	1,355 87	14,000 00
National Mine	Marquette	262	19,000	1,128 65	80 00	22 50	3,493 52	1,500 00
Newaygo	Newaygo	416	6,000	1,589 00	70 00	26 15	1,952 00	
Negaunee	Marquette	1,394	15,000	6,200 00	145 00	43 18	8,289 66	
New Baltimore	Macomb	425	2,100	1,171 67	66 30	27 00	1,705 20	
New Buffalo	Berrien	190	3,000	765 00	50 00	35 00	1,201 24	
New Haven	Macomb	232	1,500	786 00	50 00	25 68	946 53	

TABLE XIV.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of teachers. Men.	Average Monthly wages of teachers. Women.	Total Expenditures.	Total Indebtedness.
New Holland	Ottawa	185	$1,000	$620 00	$50 00	$12 00	$764 76	$325 00
New Hudson	Oakland	82	5,000	377 50	38 44	15 00	446 05	
New Troy	Berrien	150	5,000	800 00	75 00	25 00	918 15	
Niles	Berrien	1,470	50,000	7,228 25	77 96	33 86	12,066 63	
North Adams	Hillsdale	175	7,000	1,029 25	60 00	27 13	2,802 40	1,118 50
Northport	Leelanaw	130	3,000	675 00	50 00	25 00	940 26	
Northville	Wayne	291	11,000	1,940 00	70 00	28 65	2,415 49	
Nunica	Ottawa	127	3,000	650 00	45 00	20 00	1,387 13	
Okemos	Ingham	111	4,000	570 00	45 00	23 00	732 14	
Olivet	Eaton	169	1,500	502 80	.....	27 93	556 79	
Onondaga	Ingham	101	500	484 50	40 00	13 06	591 67	25 00
Ontonagon	Ontonagon	293	6,000	2,824 25	55 60	34 52	4,104 00	
Orange	Ionia	96	600	224 00	30 00	13 00	255 71	
Orion	Oakland	175	3,500	750 00	45 00	30 00	1,029 44	107 00
Ortonville	Oakland	127	3,000	590 00	39 00	20 00	767 13	
Oscoda	Iosco	463	4,500	1,830 00	60 77	40 00	5,664 12	5,000 00
Oshtemo	Kalamazoo	83	4,000	344 50	32 50	18 28	428 53	
Osseo	Hillsdale	119	3,000	444 53	34 35	16 00	516 86	
Otisco	Ionia	76	1,200	335 50	34 49	12 00	493 92	
Otisville	Genesee	211	4,000	878 00	36 56	24 50	1,122 07	11 85
Otsego	Allegan	316	10,000	1,992 00	83 33	27 60	2,813 40	
Ovid	Clinton	477	15,000	1,800 00	60 00	24 00	4,677 95	300 00
Owosso	Shiawassee	811	50,000	5,196 00	51 03	36 99	9,710 71	24,000 00
Oxford	Oakland	312	1,000	1,356 00	60 00	28 00	1,526 62	
Palmyra	Lenawee	209	4,000	442 38	31 52	24 19	665 33	
Palo	Ionia	118	5,000	874 20	57 67	23 68	4,563 26	3,200 00
Paris Tp., No.	Kent	141	1,200	480 00	33 33	20 00	564 77	
Parma	Jackson	270	14,000	1,480 00	60 00	28 00	3,581 97	6,000 00
Paw Paw	Van Buren	419	45,000	3,280 00	80 00	29 71	8,187 94	18,000 00
Pentwater	Oceana	375	7,000	2,000 00	80 00	30 00	2,220 55	
Petersburg	Monroe	230	6,000	855 00	45 00	25 00	1,233 60	
Petoskey	Emmet	473	4,500	1,457 00	70 00	27 83	3,467 97	3,000 00
Pewamo	Ionia	109	1,000	553 00	37 44	23 33	632 69	
Phœnix	Keweenaw	182	4,000	1,750 00	85 00	45 00	2,429 29	
Pierson	Montcalm	168	1,500	750 00	44 33	29 55	782 21	
Pinckney	Livingston	169	800	765 00	60 00	25 00	816 00	
Pine Run	Genesee	114	800	304 00	29 00	18 00	358 93	
Pittsford	Hillsdale	114	2,000	286 50	27 75	10 90	449 23	
Plainwell	Allegan	476	14,000	2,450 00	83 33	27 00	2,896 99	125 00
Plymouth	Wayne	462	1,500	2,410 00	100 00	23 50	2,775 16	
Pokagon	Cass	103	500	216 00	40 00	18 29	453 05	
Pontiac	Oakland	1,230	80,000	8,758 00	120 00	35 32	19,651 79	20,580 29
Port Austin	Huron	448	4,500	1,300 00	66 57	30 00	1,595 53	
Port Crescent	Huron	145	2,500	770 00	55 00	22 00	957 90	
Port Hope	Huron	248	2,500	750 00	50 00	25 00	686 75	142 90
Port Huron	St. Clair	3,003	87,400	9,310 00	75 00	32 74	22,424 73	29,000 00
Portland	Ionia	508	7,000	2,565 00	65 93	29 56	4,093 53	
Port Sanilac	Sanilac	208	1,500	720 00	60 00	30 00	779 22	
Potterville	Eaton	170	4,000	497 50	62 23	20 62	589 18	
Quincy	Branch	308	15,000	1,855 20	73 68	24 32	3,293 56	
Quincy Tp., No. 1	Houghton	555	.....	1,900 00	100 00	45 00	2,345 34	
Ransom	Hillsdale	106	1,500	254 00	34 50	14 50	312 87	
Reading	Hillsdale	229	6,000	1,350 00	.....	33 75	4,306 59	4,400 00
Reed City	Osceola	332	5,500	1,350 00	59 40	18 55	3,271 00	3,856 29
Republic	Marquette	499	4,000	2,100 00	120 00	47 50	2,915 90	
Richland	Kalamazoo	112	600	574 60	40 44	25 33	665 73	
Richmond	Macomb	202	4,000	930 00	60 00	22 22	1,916 47	1,100 00
Riga	Lenawee	261	6,000	430 00	35 00	24 44	1,199 07	6,700 00
Rochester	Oakland	293	3,000	1,327 50	68 25	24 81	1,578 78	
Rockford	Kent	305	25,000	1,615 00	65 50	32 00	5,039 66	14,000 00
Rockland	Ontonagon	392	5,000	2,525 00	125 00	38 13	3,210 42	
Romeo	Macomb	524	10,000	3,850 00	100 00	30 83	4,603 91	
Royal Oak	Oakland	171	4,500	452 00	40 00	28 00	629 86	
Saginaw	Saginaw	3,283	100,000	13,886 72	100 11	35 12	25,368 29	14,500 00
St. Charles	Saginaw	227	1,000	611 00	39 89	28 00	694 74	

TABLE XIV.—*Continued*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of Teachers. Men.	Women.	Total Expenditures.	Total Indebtedness.
St. Clair	St. Clair	715	$17,000	$3,311 00	$90 00	$30 63	$4,285 31	$5,000 00
St. Johns	Clinton	702	25,000	3,820 00	90 00	39 15	7,707 73	3,500 00
St. Joseph	Berrien	936	40,000	3,844 66	92 29	32 09	10,716 91	34,600 00
St. Louis	Gratiot	621	12,000	2,860 00	80 00	27 67	13,931 04	11,000 00
Saline	Washtenaw	270	27,000	2,540 00	90 00	32 80	4,617 63	3,000 00
Salt River	Isabella	131	1,800	449 00	37 37	19 87	616 06	100 00
Sand Beach	Huron	235	2,000	420 00	.....	26 25	1,370 40	1,700 00
Sanilac Tp., No. 2	Sanilac	189	1,200	350 50	36 66	20 66	403 25	
Saranac	Ionia	309	14,000	1,159 65	85 71	26 62	3,955 85	4,064 01
Saugatuck	Allegan	334	10,200	1,807 00	77 77	28 64	3,080 21	32 10
Sault Ste. Marie	Chippewa	666	16,000	1,500 00	88 00	33 00	5,088 07	4,800 00
Schoolcraft	Kalamazoo	392	24,000	2,027 25	69 08	32 00	5,367 17	6,500 00
Shelby	Oceana	156	2,500	525 00	37 22	23 33	608 83	
Sheridan	Montcalm	232	4,000	1,060 00	45 00	25 19	1,317 56	
Sherwood	Branch	126	3,000	570 00	38 33	25 00	832 24	
Smyrna	Ionia	96	1,000	465 00	37 50	26 67	478 14	
South Haven	Van Buren	369	5,000	1,706 80	84 21	24 50	2,157 02	
South Lyon	Oakland	116	2,500	640 00	55 56	15 56	1,109 55	1,900 00
Sparta Centre	Kent	179	4,000	784 00	50 00	27 90	911 73	
Spring Lake	Ottawa	604	9,000	2,304 00	60 00	29 29	2,575 27	
Springport	Jackson	110	4,500	675 00	50 00	25 00	1,698 97	2,400 00
Springwells Tp., No. 1	Wayne	612	13,405	1,750 00	70 00	28 75	5,524 67	2,250 00
Springwells Tp., No. 4	Wayne	908	4,000	1,240 00	46 25	25 00	1,818 84	
Stanton	Montcalm	577	7,000	2,880 00	80 00	34 67	3,926 48	100 00
Stoneville	Marquette	237	2,000	1,900 00	70 00	50 00	2,356 15	
Sturgis	St. Joseph	540	35,000	4,416 00	80 00	34 75	7,255 54	6,000 00
Tawas City	Iosco	254	2,500	1,500 00	80 00	35 00	2,272 36	4,129 33
Tecumseh	Lenawee	562	36,000	4,670 65	138 33	32 69	5,688 65	
Tekonsha	Calhoun	170	10,000	792 00	50 00	28 00	3,047 65	9,509 22
Thornville	Lapeer	122	2,500	483 50	45 00	19 88	771 60	
Three Oaks	Berrien	262	5,900	850 00	50 00	25 07	2,583 61	700 00
Three Rivers, No. 1	St. Joseph	599	12,000	3,175 00	73 50	30 50	3,984 72	
Three Rivers, No. 4	St. Joseph	308	4,000	1,320 00	60 00	24 00	2,189 86	
Traverse City	G'd Traverse	475	10,000	3,520 00	111 11	40 00	6,106 96	3,200 00
Trenton	Wayne	424	3,000	1,000 00	50 00	25 00	1,188 56	
Tuscola	Tuscola	152	1,200	780 00	60 00	18 00	969 93	
Union City	Branch	418	22,000	3,040 00	78 93	35 97	7,128 70	15,997 13
Unionville	Tuscola	155	3,000	522 00	40 00	18 00	575 74	
Utica	Macomb	334	10,000	1,718 75	48 35	26 67	2,078 13	
Vandalia	Cass	193	7,000	856 00	50 00	19 00	1,749 69	1,800 00
Vassar	Tuscola	419	6,000	2,048 00	100 00	26 86	2,457 07	
Vermontville	Eaton	235	10,000	1,130 00	49 86	24 00	1,458 81	
Vernon	Shiawassee	187	1,800	1,000 00	50 00	16 67	1,243 60	
Vicksburg	Kalamazoo	254	6,000	1,267 50	50 00	23 53	2,036 13	
Vriesland	Ottawa	215	600	770 00	50 00	20 09	836 26	
Wacousta	Clinton	103	1,200	464 00	35 71	19 45	803 78	47 65
Washington	Macomb	93	1,500	460 00	40 00	20 00	531 99	
Washington Tp. No. 2	Sanilac	185	500	315 00	35 00	.....	371 14	
Waterford	Oakland	73	6,000	600 00	38 00	22 00	708 41	
Watervliet	Berrien	140	2,200	578 75	40 00	22 44	640 15	
Watrousville	Tuscola	108	600	704 06	54 98	23 22	948 80	5 81
Wayland	Allegan	191	4,500	714 00	45 06	18 00	3,336 44	2,916 00
Wayne	Wayne	427	20,000	2,150 00	90 00	25 00	5,252 89	15,950 00
Webberville	Ingham	200	2,000	540 00	40 00	20 00	675 63	
West Bay City, No. 1	Bay	658	12,500	1,750 00	70 00	29 17	3,023 63	3,201 54
West Bay City, No. 2	Bay	1,049	10,000	3,820 00	90 00	36 96	6,225 52	3,500 00
West Bay City, No. 3	Bay	281	4,500	700 00	45 00	25 00	1,498 60	2,900 00
Westphalia	Clinton	90	500	126 00	.....	21 00	139 65	
White Cloud	Newaygo	173	3,500	700 00	50 00	20 00	2,579 44	218 50
White Hall	Muskegon	463	18,000	2,510 00	90 00	34 25	5,537 36	10,192 82
White Pigeon	St. Joseph	324	20,000	2,690 00	105 00	32 80	3,248 74	
White Rock	Huron	113	2,000	390 00	35 00	20 00	1,995 19	80 31
Williamston	Ingham	332	15,000	1,610 00	65 00	32 00	3,690 32	15,000 00
Wyandotte	Wayne	1,278	45,000	3,765 00	32 00	31 14	4,789 94	
York Tp., No. 1, frl.	Washtenaw	168	2,900	449 00	30 56	19 33	732 55	1,000 00

TABLE XIV.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Ypsilanti	Washtenaw	1,452	$54,000	$9,040 63	$65 86	$35 36	$20,541 45	$5,786 76
Zeeland Tp., No. 1, frl.	Ottawa	321	4,500	880 00	50 00	19 00	3,687 90	3,074 36
Zeeland Tp., No. 4, frl.	Ottawa	140	600	480 00	...	48 00	601 25	
Zilwaukee	Saginaw	420	7,600	1,600 00	55 55	30 00	1,990 35	6 05
Totals	389		213,712	$5,826,718	$997,066 94	$67 93	$36 02	$1,748,212 95	$1,173,003 84

TABLE XV.

Financial Statistics of One Hundred and Eighty-Two Graded Schools, as reported by Superintendents and Principals, for the Year ending June 25, 1880.

Districts.	Amount paid Superintendent or Principal.	Amount paid regular Teachers.	Amount paid special Teachers.	Total amount paid for Instruction.	Amount paid for Incidentals.	Total cost of Schools.	Cost per capita for Instruction.	Cost per capita for Incidentals.	Total cost per capita for Education.
Adrian	$1,600 00	$9,958 20	$640 00	$12,198 20	$2,935 03	$15,133 23	$11 42	$2 75	$14 17
Albion	1,100 00	3,667 50	...	4,767 50	1,366 96	6,134 46	10 31	2 96	13 27
Allegan	1,000 00	2,860 00	...	3,860 00	1,281 94	5,141 94	9 44	3 13	12 57
Allen	405 00	279 00	...	684 00	600 00	1,284 00	8 55	7 50	16 05
Alma	500 00	480 00	...	980 00	152 61	1,132 61	9 15	1 42	10 57
Almont	800 00	1,250 00	...	2,050 00	996 91	3,046 91	10 00	4 86	14 86
Alpena	1,100 00	4,527 00	150 00	5,777 00	2,289 00	8,066 00	8 83	3 51	12 34
Ann Arbor	1,800 00	16,750 70	900 00	19,450 70	4,315 88	23,766 58	13 20	2 91	16 11
Armada	650 00	428 00	...	1,078 00	462 36	1,540 36	...	...	...
Attica	450 00	400 00	...	850 00	50 00	900 00	5 55	33	5 88
Augusta	495 00	723 00	...	1,218 00	193 33	1,411 33	9 74	1 55	11 29
Au Sable	500 00	595 00	...	1,095 00	494 92	1,589 92	8 83	4 00	12 83
Battle Creek	1,200 00	8,590 00	...	9,790 00	3,229 79	13,019 79	10 43	3 44	13 87
Bay City	1,700 00	16,864 55	...	18,564 55	4,447 72	23,012 27	10 47	2 51	12 98
Beacon	1,000 00	1,200 00	...	2,200 00	...	...	...	...	...
Belleville	600 00	400 00	...	1,000 00	175 80	1,175 80	8 54	1 51	10 05
Benton Harbor	850 00	1,912 00	...	2,762 00	758 78	3,520 78	10 04	2 75	12 79
Berrien Springs	495 00	675 00	...	1,170 00	300 00	1,470 00	7 13	1 83	8 96
Big Rapids	1,000 00	3,740 00	...	4,740 00	1,938 50	6,678 50	8 02	3 90	11 92
Birmingham	800 00	1,040 00	...	1,840 00	438 89	2,278 89	8 34	1 96	10 33
Blissfield, No. 1	600 00	560 00	...	1,160 00	200 00	1,360 00	7 38	1 27	8 65
Blissfield, No. 2	600 00	370 00	...	970 00	250 00	1,220 00	8 50	2 19	10 69
Bridgeport	360 00	252 00	...	612 00	100 31	712 18	9 04	1 48	10 53
Brighton	800 00	970 00	...	1,770 00	475 00	2,245 00	10 17	2 73	12 90
Bronson	700 00	852 00	...	1,552 00	1,874 94	3,426 94	7 50	8 52	16 02
Brooklyn	700 00	650 00	...	1,350 00	...	...	8 09	...	...
Burlington	323 00	274 00	...	597 00	104 28	701 28	8 17	1 42	9 59
Byron	650 00	260 00	...	910 00	85 00	995 00	9 19	85	10 04
Cadillac	800 00	1,400 00	...	2,200 00	545 60	2,745 60	9 42	2 34	11 76
Calumet	2,150 00	11,858 00	714 50	14,722 50	6,164 88	20,887 38	10 49	4 39	14 88
Capac	500 00	500 00	...	1,000 00	151 70	1,151 70	6 66	1 00	7 66
Caro	828 00	993 60	...	1,821 60	508 16	2,329 76	7 75	2 66	10 41
Carson City	800 00	840 00	...	1,640 00	150 00	1,790 00	9 33	85	10 18
Cedar Springs	1,000 00	1,120 00	...	2,120 00	166 71	2,286 71	8 98	71	9 69
Centreville	700 00	1,200 00	...	1,900 00	854 86	2,754 86	9 05	4 07	13 12
Charlotte	1,000 00	5,238 27	...	6,238 27	1,611 27	7,849 54	11 81	3 05	14 86
Chesaning	700 00	840 00	...	1,540 00	240 00	1,780 00	8 55	1 33	9 88
Clare	459 00	225 00	...	684 00	66 02	750 02	4 78	46	5 24
Clayton	402 50	384 00	...	786 50	286 79	1,073 29	7 30	2 65	9 95
Clinton	775 00	1,172 00	...	1,947 00	386 50	2,333 50	10 35	2 05	12 40

TABLE XV.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid regular Teachers.	Amount paid special Teachers.	Total amount paid for Instruction.	Amount paid for Incidentals.	Total cost of Schools.	Cost per capita for Instruction.	Cost per capita for Incidentals.	Total cost per capita for Education.
Clio	$315 00	$225 00	.....	$540 00	$75 55	$615 55	$5 00	$0 75	$5 75
Coldwater	1,100 00	7,836 80	$400 00	9,336 80	2,260 64	11,597 44	13 18	3 18	16 36
Constantine	1,200 00	1,800 00	.....	3,000 00	430 00	3,430 00	10 52	1 51	12 03
Coopersville	360 00	360 00	.....	720 00	150 00	870 00	4 96	1 04	6 00
Coral	500 00	560 00	.....	1,060 00	150 00	1,210 00	10 52	1 43	11 95
Corunna	1,000 00	2,192 00	.....	3,192 00	185 00	3,777 00	10 78	62	11 40
Dansville	600 00	840 00	.....	1,440 00	300 00	1,740 00	10 85	2 27	13 12
Dearborn	400 00	200 00	.....	609 00	25 00	625 00	4 62	19	4 81
Decatur	800 00	1,659 00	.....	2,459 00	726 00	3,185 00	9 20	2 71	11 91
Detroit	3,300 00	145,477 75	1,740 00	150,517 75	36,797 22	187,314 97	12 92	3 19	16 11
Dexter	500 00	1,580 00	.....	2,380 00	640 00	3,020 00	7 58	2 02	9 60
Douglas	540 00	350 00	.....	890 00	.....	.....	5 27	.....	.....
Dowagiac	900 00	2,410 00	.....	3,310 00	742 13	4,052 13	10 00	2 38	12 38
Dryden	450 00	300 00	.....	750 00	175 00	925 00	6 00	1 40	7 40
East Saginaw	2,200 00	23,530 00	1,145 00	26,875 00	7,867 16	34,742 16	12 00	3 51	15 51
East Tawas	700 00	900 00	.....	1,600 00	631 27	2,231 27	8 79	3 30	12 09
Edwardsburg	540 00	540 00	.....	1,080 00	183 29	1,263 29	8 71	1 48	10 19
Evart	600 00	1,000 00	.....	1,600 00	317 58	1,917 58	7 51	1 49	9 00
Fenton	1,000 00	4,020 00	.....	5,020 00	1,266 44	6,286 44	10 22	2 58	12 80
Fillmore Tp., No. 1	390 00	178 00	.....	568 00	85 00	653 00	5 68	85	6 53
Flat Rock	500 00	391 00	.....	891 00	181 06	1,072 06	7 24	1 46	8 70
Flint	1,500 00	12,212 00	1,000 00	14,712 00	5,679 93	20,391 93	11 77	4 54	16 31
Flushing	700 00	800 00	.....	1,500 00	140 00	1,640 00	8 72	81	9 53
Fort Gratiot	600 00	900 00	.....	1,500 00	2,130 21	3,630 21	7 81	11 09	18 90
Galesburg	500 00	840 00	.....	1,340 00	350 00	1,690 00	8 58	2 24	10 82
Grand Haven	1,200 00	6,445 20	.....	7,645 20	2,166 55	9,811 75	10 46	2 96	13 42
Grand Ledge	450 00	945 00	.....	1,395 00	175 00	1,570 00	6 97	87	7 84
Grand Rapids	2,000 00	43,095 10	2,000 00	47,095 10	8,465 79	55,560 89	12 52	2 25	14 77
G'd Rapids Tp., No. 1	500 00	372 00	.....	872 00	149 67	1,021 67	4 37	77	5 14
Grandville	450 00	840 00	.....	1,290 00	460 00	1,750 00	7 86	2 80	10 66
Greenville	1,400 00	4,400 00	.....	5,800 00	3,260 00	9,060 00	10 97	6 16	17 13
Hamtramck Tp., No. 5	600 00	300 00	.....	900 00	.....	.....	.....	.....	.....
Hancock	1,200 00	3,000 00	.....	4,200 00	1,366 85	5,566 85	11 53	3 75	15 28
Hanover	800 00	550 00	.....	1,350 00	.....	.....	10 00	.....	.....
Harrisville	700 00	505 00	.....	1,205 00	350 00	1,555 00	10 04	2 86	12 90
Hartland	400 00	200 00	.....	600 00	60 00	660 00	5 26	70	5 96
Hastings	700 00	2,300 00	.....	3,000 00	1,279 41	4,279 41	10 86	2 69	13 55
Holly	1,000 00	1,598 00	40 00	2,638 00	625 89	3,263 89	8 20	2 37	10 57
Houghton	1,200 00	5,272 50	.....	6,472 50	3,341 21	9,813 71	11 51	5 94	17 45
Howard City	630 00	585 00	.....	1,215 00	219 16	1,434 16	10 12	1 83	11 95
Howell	1,000 00	3,030 00	.....	4,030 00	1,200 00	5,230 00	10 92	3 25	14 17
Hudson	1,000 00	1,920 00	.....	2,920 00	699 95	3,619 95	9 32	2 43	11 75
Imlay City	700 00	650 00	.....	1,350 00	391 22	1,741 22	6 67	1 93	8 60
Ishpeming	1,800 00	6,183 00	.....	7,983 00	2,719 53	10,702 53	9 34	3 14	12 48
Jackson, No. 1	1,700 00	21,666 00	900 00	24,266 00	4,366 70	28,632 70	.....	.....	.....
Jonesville	1,000 00	1,760 00	.....	2,760 00	1,223 26	3,983 26	13 46	5 96	19 42
Kalamazoo	1,430 12	16,137 00	1,168 00	18,735 12	3,575 98	22,311 10	11 93	2 27	14 20
Lakeview	400 00	300 00	.....	700 00	154 98	854 98	5 83	1 29	7 12
Lansing	1,000 00	10,079 99	300 00	11,379 99	4,788 19	16,168 18	11 01	4 63	15 64
Lapeer	1,200 00	4,475 00	.....	5,675 00	1,264 47	6,939 47	11 21	2 50	13 71
Lawrence	700 00	820 00	.....	1,520 00	365 98	1,885 98	9 50	2 28	11 78
Lawton	700 00	640 00	.....	1,340 00	322 98	1,662 98	9 64	2 32	11 96
Leslie	600 00	1,000 00	.....	1,600 00	300 00	1,900 00	5 15	1 15	6 30
Lexington	500 00	680 00	.....	1,180 00	195 69	1,375 69	6 31	1 03	7 34
Linden	500 00	500 00	.....	1,000 00	176 81	1,176 81	7 10	1 25	8 35
Litchfield	600 00	670 00	.....	1,270 00	100 00	1,370 00	7 57	62	8 19
Little Traverse	360 00	247 50	.....	607 50	128 30	735 80	7 79	1 64	9 43
Ludington	1,000 00	3,663 75	.....	4,663 75	856 28	5,520 03	8 15	1 49	9 64
Manchester	1,000 00	2,140 00	.....	3,140 00	580 00	3,720 00	9 34	1 42	10 76
Manistee	1,400 00	6,278 75	.....	7,678 75	3,033 59	10,712 34	10 46	4 13	14 59

TABLE XV.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid regular Teachers.	Amount paid special Teachers.	Total amount paid for Instruction.	Amount paid for Incidentals.	Total cost of Schools.	Cost per capita for Instruction.	Cost per capita for Incidentals.	Total cost per capita for Education.
Maple Rapids	$360 00	$666 00	.....	$1,026 00	$225 70	$1,251 70	$5 96	$1 30	$7 26
Marine City	800 00	1,080 00	.....	1,880 00	225 00	2,105 00	8 07	95	9 02
Marlette	500 00	350 00	.....	850 00	300 00	1,150 00	5 00	1 76	6 76
Marquette	1,300 00	3,887 00	.....	5,187 00	2,454 78	7,641 78	7 24	3 42	10 66
Marshall	1,331 00	5,975 00	.....	7,306 00	1,871 16	9,177 16	10 74	2 75	13 49
Marysville	277 50	177 00	.....	454 50	33 94	488 44	4 63	34	4 97
Mason	860 00	2,140 00	.....	3,000 00	600 00	3,600 00	8 84	1 76	10 60
Memphis	600 00	400 00	.....	1,000 00	236 13	1,236 13	6 25	1 47	7 72
Mendon	700 00	1,160 00	.....	1,860 00	300 06	2,160 06	5 70	1 00	6 70
Menominee	1,000 00	2,003 00	.....	3,003 00	705 14	3,708 14	7 47	1 75	9 22
Midland, No. 3	800 00	1,200 00	.....	2,000 00	1,000 00	3,000 00	6 71	3 35	10 06
Monroe	1,200 00	1,200 00	$10 00	2,410 00	756 00	3,166 00	8 92	2 80	11 72
Montague	800 00	1,182 50	.....	1,982 50	598 14	2,580 64	6 65	1 70	8 35
Morenci	400 00	864 00	.....	1,264 00	350 00	1,614 00	4 21	1 16	5 37
Moscow	306 00	104 00	.....	410 00	150 00	560 00	5 25	1 97	7 22
Mount Clemens	1,100 00	2,080 00	.....	3,180 00	787 61	3,967 61	8 82	2 18	11 00
Mount Morris	280 00	215 00	.....	495 00	25 00	520 00	4 95	25	5 20
Mount Pleasant	600 00	920 00	.....	1,520 00	231 32	1,751 32	5 71	1 02	6 73
Muskegon	1,200 00	11,241 50	550 00	12,991 50	3,900 90	16,892 40	12 05	3 62	15 67
Napoleon	600 00	684 00	.....	1,284 00	225 00	1,509 00	10 44	1 82	12 26
Negaunee	1,450 00	4,750 00	.....	6,200 00	1,512 66	7,712 66	9 17	2 23	11 40
New Baltimore	600 00	571 67	.....	1,171 67	250 00	1,421 67	7 19	1 48	8 67
New Buffalo	450 00	315 00	.....	765 00	117 50	882 50	7 49	1 14	8 63
Niles	1,200 00	6,026 25	.....	7,226 25	2,640 38	9,866 63	11 20	4 09	15 29
Northville	700 00	1,200 00	40 00	1,940 00	400 00	2,340 00	9 32	1 92	11 24
Onondaga	360 00	124 50	.....	484 50	6 90	491 40	4 48	06	4 54
Oscoda	700 00	1,130 00	.....	1,830 00	327 31	2,157 31	7 95	1 42	9 37
Ovid	600 00	1,200 00	.....	1,800 00	345 65	2,145 65	5 81	1 12	6 93
Owosso	1,000 00	4,198 00	.....	5,198 00	2,092 28	7,290 28	10 46	4 21	14 67
Oxford	600 00	756 00	.....	1,356 00	172 97	1,528 97	7 53	95	8 48
Palmyra	266 98	175 40	.....	442 38	80 31	522 69	3 68	67	4 35
Parma	600 00	880 00	.....	1,480 00	.....	.....	7 44	.....	.....
Paw Paw	800 00	2,480 00	.....	3,280 00	600 00	3,880 00	10 82	1 98	12 80
Petersburg	405 00	450 00	.....	855 00	132 30	987 30	5 82	90	6 72
Phœnix	850 00	900 00	.....	1,750 00	.....	.....	11 36	.....	.....
Pierson	450 00	300 00	.....	750 00	43 00	793 00	7 50	43	7 93
Plainwell	750 00	1,700 00	.....	2,450 00	411 73	2,861 73	7 81	1 39	9 20
Pontiac	1,500 00	7,258 00	.....	8,758 00	2,229 79	10,987 79	12 67	3 24	15 91
Port Austin	700 00	600 00	.....	1,300 00	300 00	1,600 00	11 61	2 00	13 61
Port Hope	500 00	250 00	.....	750 00	90 98	840 98	6 75	82	7 57
Port Sanilac	540 00	180 00	.....	720 00	50 00	770 00	5 37	38	5 75
Reed City	600 00	750 00	.....	1,350 00	250 00	1,600 00	5 42	98	6 40
Republic	1,200 00	875 00	25 00	2,100 00	500 00	2,600 00	14 55	3 22	17 77
Richmond	540 00	390 00	.....	930 00	122 91	1,052 91	6 66	88	7 54
Rockland	1,000 00	1,525 00	.....	2,525 00	685 42	3,210 42	10 02	2 72	12 74
Romeo	1,500 00	2,350 00	.....	3,850 00	900 00	4,750 00	11 32	2 64	13 96
Saginaw	1,600 00	11,606 72	680 00	13,886 72	3,075 78	16,962 50	10 73	2 38	13 11
St. Clair	800 00	2,500 00	.....	3,300 00	693 81	3,993 81	8 69	1 82	10 51
St. Johns	900 00	2,920 00	.....	3,820 00	974 73	4,794 73	8 32	2 12	10 44
St. Joseph	900 00	2,944 66	.....	3,844 66	1,027 74	4,873 40	8 37	2 24	10 61
St. Louis	900 00	1,960 00	.....	2,860 00	300 00	3,160 00	8 14	85	8 99
Sand Beach	260 00	160 00	.....	420 00	75 00	495 00	3 08	55	3 63
Saugatuck	700 00	1,107 00	.....	1,807 00	485 29	2,292 29	9 46	2 54	12 00
Sault Ste. Marie	880 00	680 00	.....	1,560 00	974 39	2,534 39	.....	.....	.....
South Haven	800 00	906 80	.....	1,706 80	450 22	2,157 02	8 06	1 58	9 64
Sparta	500 00	284 00	.....	784 00	.....	.....	6 12	.....	.....
Spring Lake	630 00	1,674 00	.....	2,304 00	200 00	2,504 00	7 11	62	7 73
Springwells, No. 1	700 00	1,050 00	.....	1,750 00	.....	.....	6 71	.....	.....
Springwells, No. 4	500 00	740 00	.....	1,240 00	550 00	1,790 00	6 20	2 75	8 95
Stanton	800 00	2,080 00	.....	2,880 00	681 81	3,561 81	9 52	2 25	11 77

TABLE XV.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid regular Teachers.	Amount paid special Teachers.	Total amount paid for Instruction.	Amount paid for Incidentals.	Total cost of Schools.	Cost per capita for Instruction.	Cost per capita for Incidentals.	Total cost per capita for Education.
Sturgis	$1,100 00	$3,280 00	$36 00	$4,416 00	$723 00	$5,139 00	$12 10	$2 03	$14 13
Tawas City	800 00	700 00	.....	1,500 00	202 66	1,702 66	9 34	1 27	10 61
Tecumseh	1,400 00	3,225 00	45 65	4,670 65	1,375 00	6,045 65	12 17	3 55	15 72
Three Oaks	400 00	450 00	.....	850 00	300 00	1,150 00	6 64	2 34	8 98
Traverse City	1,000 00	2,520 00	.....	3,520 00	800 00	4,320 00	13 43	3 05	16 48
Union City	1,084 00	1,956 00	.....	3,040 00	876 00	3,916 00	8 44	2 43	10 87
Vandalia	400 00	456 00	.....	856 00	173 69	1,029 69	4 97	1 09	6 06
Vermontville	500 00	630 00	.....	1,130 00	250 00	1,380 00	6 72	1 48	8 20
Vernon	500 00	500 00	.....	1,000 00	300 00	1,300 00	6 25	1 88	8 13
Vicksburg	450 00	817 50	.....	1,267 50	325 00	1,592 50	6 66	1 71	8 37
Vriesland	550 00	220 00	.....	770 00	56 00	826 00	5 13	41	5 54
Washington	280 00	180 00	.....	460 00	71 99	531 99	7 18	1 12	8 30
Wayland	390 00	324 00	.....	714 00	54 47	768 47	3 96	30	4 26
Wayne	900 00	1,250 00	.....	2,150 00	320 00	2,470 00	7 54	1 12	8 66
White Cloud	500 00	200 00	.....	700 00	50 00	750 00	8 75	62	9 37
White Hall	900 00	1,610 00	.....	2,510 00	425 00	2,935 00	11 15	1 80	12 95
White Pigeon	1,050 00	1,640 00	.....	2,690 00	558 00	3,248 00	9 92	2 06	11 98
Williamston	650 00	960 00	.....	1,610 00	250 00	1,860 00	8 68	1 31	9 99
Wyandotte	600 00	3,165 00	.....	3,765 00	813 00	4,578 00	7 35	1 88	9 23
Ypsilanti	1,200 00	7,840 63	.....	9,040 63	3,748 60	12,789 23	11 04	4 58	15 62
Zeeland	500 00	380 00	.....	880 00	541 59	1,421 59	4 70	2 89	7 59
Zilwaukee	750 00	850 00	.....	1,600 00	338 75	1,938 75	10 33	2 00	12 33
Totals.....182	$137,858 10	$613,280 29	$12,484 15	$763,622 54	$201,781 85	$963,411 21	$10 64	$2 81	$13 45

TABLE XVI.

Miscellaneous Statistics of One Hundred and Eighty-Six Graded Schools, as Reported by Superintendents and Principals, for the Year ending June 25, 1880.

Districts.	Total enrollment.	Average number belonging.	Average daily attendance.	Number of Men Teachers.	No. of Women Teachers.	No. of Special Teachers.	Ave. No. of pupils to each Teacher.	Portion of Supt's time given to supervision.	Number of Pupils Studying.				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Adrian	1,135	1,068	1,000	3	26	1	39	5-6	29	....	7	27	....	yes	yes
Albion	601	462	449	1	12	....	38	1-2	4	....	....	10	....	....	....
Allegan	575	409	389	1	11	....	34	1-5	19	....	....	9	....	....	....
Allen	104	80	75	1	2	....	27	1-20	.....	.....	.....	.....	....	....	....
Alma	177	107	93	2	1	....	31	.....	.....	.....	.....	.....	....	....	....
Almont	288	205	169	2	3	....	41	.....	13	....	....	....	....	....	yes
Alpena	861	651	487	2	10	1	59	1-2	12	....	....	20	yes	....	....
Ann Arbor	1,877	1,473	1,419	5	32	2	45	4-5	233	62	75	58	yes	yes	yes
Armada	160	.....	.....	2	2	....	....	.....	.....	.....	.....	.....	....	....	....
Attica	178	153	125	1	2	....	51	.....	.....	.....	.....	.....	....	....	....
Augusta	126	120	101	2	2	....	30	.....	.....	.....	.....	.....	....	....	....
Au Sable	170	124	109	1	2	....	42	.....	.....	.....	.....	.....	....	....	....
Battle Creek	1,180	939	876	3	22	....	38	5-6	24	4	11	9	....	....	....
Bay City	2,007	1,772	1,660	2	43	....	40	2-3	30	....	27	270	yes	....	....
Beacon	333	.....	.....	1	2	....	....	.....	.....	.....	.....	.....	....	....	....

TABLE XVI.—*Continued.*

Districts.	Total enrollment.	Average number belonging.	Average daily attendance.	Number of Men Teachers.	Number of Women Teachers.	Number of Special Teachers.	Ave. No. of pupils to each Teacher.	Portion of Supt's time given to supervision.	Number of Pupils Studying.				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Belleville	168	117	98	1	2	....	39	1-20	.....	....	....	.....	....	....	....
Benton Harbor	293	275	241	1	7	....	34	1-6	.....	....	....	.....	....	....	....
Berrien Springs	200	164	138	1	3	....	41	1-8	.....	....	....	.....	....	....	....
Big Rapids	878	669	584	2	10	....	55	1-2	11	....	2	4	....	....	....
Birmingham	344	220	182	3	2	....	44	1-4	8	....	....	.....	yes	yes	yes
Blissfield, No. 1	210	157	115	1	2	....	52	.....	.....	....	....	.....	....	....	yes
Blissfield, No. 2	170	114	101	1	2	....	38	.....	3	....	....	5	....	....	yes
Bridgeport	85	68	59	1	1	....	34	.....	.....	....	....	3	yes	yes	yes
Brighton	250	174	160	1	4	....	35	1-8	7	....	....	.....	yes	yes	yes
Bronson	260	220	170	1	4	....	44	.....	.....	....	....	.....	yes	yes	yes
Brooklyn	167	126	115	1	2	....	42	.....	.....	....	....	.....	yes	yes	yes
Burlington	110	73	52	1	2	....	26	.....	2	....	....	.....	....	yes	yes
Byron	135	99	80	1	1	....	49	.....	.....	....	....	.....	....	....	....
Cadillac	278	233	207	1	4	....	47	.....	.....	....	....	.....	....	yes	yes
Calumet	1,954	1,403	1,133	8 3-5	16	2	58	3-5	5	....	....	.....	yes	....	....
Capac	206	150	112	1	2	....	50	1-12	2	....	....	.....	yes	yes	yes
Caro	355	234	214	1	4	....	48	1-12	.....	....	....	.....	....	....	....
Carson City	200	176	160	1	3	....	44	1-30	.....	....	....	.....	....	....	....
Cedar Springs	377	236	223	1	4	....	47	1-10	10	....	....	24	....	....	....
Centreville	221	210	159	1	5	....	35	1-12	12	....	....	13	yes	yes	yes
Charlotte	753	528	487	.....	13½	....	39	2-3	12	....	....	.....	....	yes	yes
Chesaning	206	180	163	1	3	....	45	1-30	.....	....	....	.....	....	....	....
Clare	143	129	115	1	1	....	64	1-12	.....	....	....	.....	yes	yes	yes
Clayton	136	108	94	1	2	....	36	.....	.....	....	....	.....	....	....	....
Clinton	209	188	178	1	4	....	38	1-6	18	....	....	.....	....	....	....
Clio	113	102	90	1	1	....	51	.....	.....	....	....	.....	....	....	....
Coldwater	1,047	709	658	3	20	1	31	2-3	39	7	15	13	....	....	yes
Constantine	318	285	235	1	7	....	36	1-6	14	....	....	6	yes	....	yes
Coopersville	145	130	121	1	2	....	43	1-10	.....	....	....	95	....	....	....
Coral	142	130	105	1	2	....	43	.....	.....	....	....	.....	....	....	....
Corunna	455	296	264	2	6	....	37	.....	10	3	....	6	....	....	....
Dansville	171	133	100	1	3	....	33	.....	4	....	....	5	....	....	....
Dearborn	196	130	98	1	1	....	65	.....	.....	....	....	.....	yes	....	yes
Decatur	367	268	.....	1	6	....	38	1-8	11	....	....	8	....	yes	....
Detroit	15,719	11,513	10,817	11	242½	2	52	all	122	8	98	133	yes	yes	....
Dexter	325	317	283	1	7	....	39	.....	.....	....	....	.....	....	....	....
Douglas	139	119	98	1	2	....	39	1-12	.....	....	....	.....	....	....	yes
Dowagiac	445	310	290	3	5	....	39	2-9	11	....	....	4	....	....	....
Dryden	137	125	111	1	2	....	42	1-30	.....	....	....	.....	....	....	....
East Saginaw	3,011	2,239	2,124	5	48½	2½	44	all	79	16	....	774	yes	yes	yes
East Tawas	197	182	131	1	3	....	45	1-20	.....	....	....	.....	....	....	....
Edwardsburg	167	124	101	1	2	....	41	.....	.....	....	....	.....	....	....	....
Evart	285	213	146	1	3	....	53	.....	.....	....	....	.....	....	yes	....
Fenton	664	491	460	3	11	....	45	1-3	51	12	19	.....	....	....	....
Fillmore Tp., No. 1	166	100	79	1	1	....	50	.....	.....	....	....	.....	....	....	yes
Flat Rock	166	123	87	1	2	....	41	.....	.....	....	....	.....	....	....	....
Flint	1,783	1,249	1,149	2	33	1½	35	5-6	.....	....	....	.....	yes	yes	yes
Flushing	257	172	154	2	2	....	43	1-10	.....	....	....	.....	....	....	....
Fort Gratiot	342	250	192	1	3	....	63	.....	.....	....	....	.....	....	....	yes
Galesburg	237	156	143	1	3	....	39	.....	4	....	....	.....	....	....	....
Gibraltar	73	50	40	1	.....	....	50	.....	.....	....	....	.....	....	....	....
Grand Haven	1,113	731	655	1	17	....	42	5-6	20	....	....	.....	....	....	....
Grand Ledge	290	200	.....	2	3	....	40	.....	.....	....	....	.....	....	....	....
Grand Rapids	5,390	3,762	3,464	9	90	2	39	all	50	7	38	50	yes	....	yes
Grand Rapids Tp, No. 1	223	190	127	1	2	....	63	.....	.....	....	....	.....	....	....	....
Grandville	243	164	142	1	3	....	41	1-6	.....	....	....	.....	....	....	yes
Greenville	751	528	490	1	13	....	39	2-7	18	....	11	1	yes	....	....
Hamtramck Tp., No. 5	209	110	99	1	1	....	55	.....	.....	....	....	.....	yes	....	....
Hancock	410	364	300	2	5	....	52	1-5	2	....	....	.....	yes	....	....
Hanover	152	135	126	1	2	....	45	.....	.....	....	....	.....	....	....	yes

TABLE XVI.—*Continued.*

Districts.	Total enrollment.	Average number belonging.	Average daily attendance.	Number of Men Teachers.	Number of Women Teachers.	Number of Special Teachers.	Ave. No. of pupils to each Teacher.	Portion of Supt's time given to supervision.	Number of Pupils Studying.				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Harrisville	192	120	107	1	2	....	40	.....	.....	.....	.....	.....	.....	.....	.....
Hartland	114	105	81	1	1	....	52	.....	.....	.....	.....	.....	yes	....	yes
Hastings	648	476	422	1	9	....	48	.....	23	1	.....	.....	.....	.....	.....
Holly	312	263	238	1	6	....	38	1-4	15	2	....	7	....	....	yes
Houghton	634	562	525	2	10	....	47	1-2	3	....	....	....	....	....	....
Howard City	157	120	108	1	2	....	40	.....	.....	....	....	....	....	....	yes
Howell	504	369	344	1	9	....	41	1-2	2	....	4	5	....	....	....
Hudson	393	342	313	1	7	....	43	1-3	8	....	....	18	....	....	....
Imlay City	320	202	180	1	3	....	50	1-4	.....	....	....	....	....	....	....
Ishpeming	1,053	824	759	2	14	....	53	1-4	6	....	....	....	....	yes	yes
Jackson, No. 1	1,762	.....	.....	4	33	1	....	4-5	.....	....	....	.....	yes	....	....
Jonesville	320	205	189	2	4	....	38	1-4	11	....	....	.....	....	....	....
Kalamazoo	2,139	1,570	1,448	3	42	2	36	all	39	9	25	30	yes	....	....
Lakeview	146	120	90	1	1	....	60	1-4	.....	....	....	.....	yes	....	....
Lansing	1,577	1,033	961	3	26½	1	37	9-10	22	....	....	16	yes	....	....
Lapeer	722	506	479	1	14	....	36	3-8	34	11	....	.....	....	....	....
Lawrence	220	160	130	1	3	....	40	1-13	.....	....	....	.....	....	....	....
Lawton	249	139	124	1	3	....	35	1-12	.....	....	....	.....	....	yes	yes
Leslie	304	260	230	1	5	....	43	.....	9	2	2	.....	....	....	....
Lexington	210	187	.....	1	3	....	46	.....	1	....	....	.....	....	....	....
Linden	159	141	117	1	2	....	47	.....	.....	....	....	.....	....	....	....
Litchfield	220	170	160	1	3	....	42	.....	.....	....	....	.....	....	....	....
Little Traverse	171	78	.....	1	1	....	39	.....	.....	....	....	.....	....	....	....
Ludington	861	572	490	2	9	....	55	1-3	.....	....	....	.....	....	....	....
Manchester	336	229	192	2	5	....	33	1-12	24	....	4	10	yes	....	....
Manistee	743	734	693	1	15	....	46	1-2	22	....	....	8	....	....	....
Maple Rapids	197	172	133	1	3	....	43	.....	.....	....	....	.....	....	....	yes
Marine City	286	242	221	1	4	....	48	1-6	.....	....	....	.....	....	yes	yes
Marlette	220	170	140	1	2	....	57	1-2	.....	....	....	.....	yes	yes	yes
Marquette	791	716	639	1	14	....	48	1-7	9	5	....	.....	yes	yes	yes
Marshall	865	680	670	1	18	....	38	4-5	32	....	3	18	....	....	....
Marysville	121	98	68	1	1	....	49	.....	.....	....	....	.....	....	....	....
Mason	371	339	332	1	7	....	48	1-3	15	....	....	35	....	yes	....
Memphis	195	160	149	1	2	....	53	.....	.....	....	....	.....	....	....	....
Mendon	293	224	200	2	3	....	45	.....	6	....	....	4	....	....	yes
Menominee	389	294	246	2	4	....	49	.....	6	....	....	.....	....	....	....
Midland, No. 3	332	298	260	1	4	....	59	.....	17	....	....	21	....	....	....
Monroe	399	270	240	1	5	....	45	.....	15	2	....	4	....	....	....
Montague	364	250	192	1	4	....	50	1-20	.....	....	....	.....	....	....	....
Morenci	347	300	165	1	5	....	50	.....	.....	....	....	.....	....	....	....
Moscow	80	76	60	1	1	....	38	.....	.....	....	....	.....	....	....	....
Mt. Clemens	508	360	330	1	7	....	45	1-4	8	....	....	.....	....	yes	yes
Mt. Morris	119	100	90	1	1	....	50	.....	.....	....	....	.....	....	....	yes
Mt. Pleasant	306	263	203	1	3	....	66	.....	11	....	....	.....	....	....	....
Muskegon	1,776	1,078	1,018	3	27	1	36	5-7	40	1	....	.....	....	....	yes
Napoleon	147	123	98	1	3	....	30	1-5	.....	....	....	.....	yes	....	yes
Negaunee	922	676	519	1	11	....	56	1-2	.....	....	....	.....	....	....	....
New Baltimore	266	163	119	1	3	....	40	.....	.....	....	....	8	....	....	....
New Buffalo	303	102	85	1	1	....	51	.....	.....	....	....	.....	yes	yes	yes
New Hudson	79	70	52	1	1	....	35	.....	.....	....	....	.....	....	....	....
Niles	947	644	583	3	16	....	36	2-3	15	2	....	.....	....	....	....
Northville	230	208	195	1	4	....	42	1-6	10	....	2	3	yes	....	....
Onondaga	121	108	96	1	1	....	54	.....	.....	....	....	.....	yes	yes	yes
Oscoda	251	230	200	1	3	....	56	.....	.....	....	....	.....	....	....	....
Ovid	353	310	245	1	5	....	51	1-15	.....	....	....	.....	....	....	yes
Owosso	699	497	453	4	14	....	36	1-3	27	3	5	9	....	....	....
Oxford	268	180	137	1	3	....	45	.....	.....	....	....	.....	....	....	....
Palmyra	133	120	102	1	1	....	60	1-20	.....	....	....	.....	....	....	yes
Parma	274	199	172	1	3	....	49	.....	9	....	....	.....	....	....	....
Paw Paw	397	303	287	1	9	....	31	1-3	25	....	....	10	....	....	....

TABLE XVI.—*Continued.*

Districts.	Total enrollment.	Average number belonging.	Average daily attendance.	Number of Men Teachers.	Number of Women Teachers.	Number of Special Teachers.	Ave. No. of pupils to each Teacher.	Portion of Supt's time given to supervision.	Number of Pupils Studying.				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Petersburg	164	147	117	1	2	....	49	.....	8	....	....	.....	....	....	....
Phœnix	182	154	148	1	2	....	51	1-12	.....	....	....	.....	....	....	yes
Pierson	138	100	69	1	1	....	50	.....	.....	....	....	.....	....	....	....
Plainwell	414	310	293	1	7	....	39	1-6	8	....	....	.....	....	....	....
Pontiac	927	691	665	2	17	....	38	2-3	67	11	31	17	....	yes	yes
Port Austin	117	112	103	1	2	....	37	1-12	3	....	....	.....	yes	yes	yes
Port Hope	120	111	.....	1	1	....	55	.....	1	....	....	1	....	yes	yes
Port Sanilac	190	134	100	1	1	....	67	.....	.....	....	....	.....	....	yes	yes
Reed City	249	223	200	1	3	....	56	1-18	.....	....	....	.....	....	....	....
Republic	229	155	133	1	2	1	52	.....	.....	....	....	.....	yes	....	....
Richmond	217	139	128	1	2	....	46	1-12	.....	....	....	3	....	....	....
Rockland	257	252	215	1	5	....	42	.....	.....	....	....	.....	....	yes	yes
Romeo	457	340	322	2	6	....	43	1-5	22	3	6	4	....	....	....
Saginaw	1,776	1,294	1,233	4	26	2	39	all	25	....	6	450	yes	yes	yes
St. Clair	477	381	334	2	7	....	43	1-6	3	....	6	20	....	....	....
St. Johns	639	459	416	2	8	....	46	1-3	9	....	5	9	....	....	....
St. Joseph	675	459	420	1	12	....	46	1-2	.....	....	....	21	....	....	....
St. Louis	393	352	323	1	7	....	44	1-5	.....	....	....	.....	....	....	....
Sand Beach	136	102	78	.....	2	....	51	.....	.....	....	....	.....	....	....	....
Saugatuck	306	191	170	1	5	....	38	1-5	.....	....	....	.....	....	....	....
Sault Ste. Marie	210	.....	.....	1	2	....	....	.....	.....	....	....	.....	....	....	....
South Haven	276	234	192	1	4	....	47	1-12	.....	....	....	.....	....	....	....
Sparta Center	174	128	81	1	1	....	64	.....	.....	....	....	.....	yes	yes	yes
Spring Lake	409	321	257	1	6	....	46	1-2	.....	....	....	.....	....	yes	yes
Springwells, No. 1	349	261	245	1	4	....	52	.....	.....	....	....	.....	....	....	....
Springwells, No. 4	274	200	93	2	2	....	50	.....	.....	....	....	.....	....	....	....
Stanton	492	302	272	1	6	....	43	1-6	15	....	....	.....	....	....	....
Sturgis	511	357	326	2	8	1	36	1-3	16	....	2	8	....	yes	yes
Tawas City	165	97	91	1	2	....	32	1-10	2	....	....	.....	yes	yes	yes
Tecumseh	489	387	361	1	10⅔	1	38	1-3	20	2	3	14	yes	....	....
Three Oaks	182	128	120	1	2	....	43	.....	.....	....	....	.....	....	....	....
Traverse City	369	262	244	1	7	....	33	1-3	.....	....	....	.....	yes	....	yes
Union City	531	362	300	1	7	....	42	.....	36	11	5	.....	....	....	....
Vandalia	205	172	155	1	3	....	43	.....	7	....	....	.....	....	....	....
Vermontville	192	168	153	2	2	....	42	.....	5	1	....	.....	....	....	....
Vernon	160	145	115	1	2	....	48	.....	1	....	....	.....	....	....	yes
Vicksburg	235	190	140	1	4	....	38	.....	.....	....	....	.....	....	....	....
Vriesland	137	130	120	1	1	....	65	.....	.....	....	....	.....	....	....	yes
Washington	68	64	41	1	1	....	32	.....	9	....	....	.....	....	....	....
Waterford	97	91	82	1	1	...	45	.....	6	4	....	.....	yes	....	yes
Wayland	180	156	127	1	2	....	52	.....	.....	....	....	8	....	....	....
Wayne	385	285	.....	1	5	....	47	1-4	22	3	....	4	yes	....	yes
West Bay City, No. 1	445	345	208	1	4	....	69	1-6	.....	....	....	.....	....	....	....
White Cloud	120	80	54	1	1	....	40	.....	.....	....	....	.....	....	....	yes
White Hall	346	225	201	1	5	....	37	.....	.....	....	....	.....	....	....	....
White Pigeon	335	271	251	1	5	....	45	1-10	15	....	....	12	yes	yes	yes
Williamston	224	183	172	1	3	....	46	.....	8	....	....	.....	....	yes	yes
Wyandotte	566	512	470	1	12	....	43	1-2	.....	....	....	.....	....	....	....
Ypsilanti	1,199	819	735	5	17	....	37	2-3	10	2	5	8	....	....	....
Zeeland	216	187	144	1	2	....	62	1-20	.....	....	....	.....	....	....	....
Zilwaukee	259	155	113	2	2	....	39	.....	.....	....	....	.....	....	....	....
Totals	99,606	71,747	64,180	277 3-5	1,506⅓	25	40	.....	1,671	194	417	2,332	43	39	64

TABLE XVII.

Statistics of the High-School Department of Fifty-Seven Graded School Districts, Compiled from Reports of Superintendents and Principals for the Year ending June 25, 1880.

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	Average No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Average Age of Class Promoted		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita for Education.
								Years.	Months.			
Adrian	172	134	130	1 4-6	3	36	11	18	----	$21 32	$2 75	$24 07
Allegan	38	28	27	8-10	1	16	9	17	4	30 71	3 13	33 84
Almont	51	39	25	1	-------	39	------	19	10	12 82	4 86	17 68
Alpena	80	58	41	1	1	29	------	16	----	16 60	3 51	20 11
Ann Arbor	449	313	305	4	4 4-10	38	245	17	6	20 30	2 91	23 21
Battle Creek	169	129	123	2 1-6	2	31	46	17	5	18 28	3 44	21 72
Benton Harbor	51	36	28	1	1	18	12	----	----	30 62	2 75	33 37
Big Rapids	76	61	51	2	-------	31	------	17	6	10 30	2 90	13 20
Birmingham	73	48	41	2	-------	24	37	----	----	19 16	1 98	21 14
Brighton	51	30	28	1	-------	30	20	----	----	23 33	2 73	26 06
Cadillac	49	31	27	1	-------	31	1	----	----	22 22	2 34	24 56
Caro	68	49	45	½	1	36	18	----	----	14 11	2 16	16 27
Charlotte	89	56	53	-------	2 ½	23	32	----	----	26 84	3 05	29 89
Coldwater	89	75	71	1 ½	2	23	34	----	----	27 77	3 18	30 95
Constantine	66	50	40	1	1	20	------	16	----	12 20	1 50	13 70
Decatur	97	64	------	1	1	32	39	15	----	17 20	2 71	19 91
Detroit	801	605	591	4	19	42	------	18	----	24 88	3 19	28 07
East Saginaw	188	145	136	2	3 ½	25	13	18	1	24 49	3 51	28 00
Fenton	107	78	77	1 ½	1	30	41	17	6	20 36	2 58	22 94
Grand Haven	82	41	37	½	1 ¾	19	8	18	5	35 75	2 96	38 71
Grand Rapids	329	258	242	5	4 ½	34	------	18	----	31 65	2 25	33 90
Greenville	140	100	100	1	3	25	16	18	----	21 94	6 16	28 10
Hancock	41	34	30	1	-------	34	3	17	----	27 94	3 75	31 69
Hastings	57	44	43	1	1	22	------	----	----	22 72	2 69	25 41
Holly	66	49	44	1	1	25	21	19	----	10 79	2 37	13 16
Houghton	56	52	48	1	1	26	3	----	----	13 98	5 94	19 92
Howell	46	32	29	½	1	32	15	----	----	37 30	3 25	40 55
Hudson	82	76	------	-------	2	38	31	----	----	16 39	2 43	18 71
Jonesville	54	38	36	1	1	19	28	----	----	25 80	4 20	30 00
Kalamazoo	193	149	139	1	4	30	53	18	6	22 20	2 27	24 47
Lansing	104	78	73	1 1-10	1 ¾	33	------	----	----	19 74	4 63	24 37
Lapeer	111	85	82	-------	3	28	28	18	6	22 35	2 50	24 85
Ludington	73	56	54	½	1	37	12	17	----	16 00	1 49	17 49
Manchester	67	57	53	2	-------	28	26	19	----	26 31	3 39	29 70
Midland, No. 3	44	38	36	1	1	19	------	----	----	21 00	3 33	24 33
Monroe	46	40	35	1	1	20	9	19	4	37 50	2 80	40 30
Montague	43	37	29	1	-------	37	4	----	----	11 63	1 70	13 33
Morenci	61	40	34	1	-------	40	37	14	----	5 88	1 00	6 88
Mount Clemens	72	55	52	1	1	27	9	17	----	19 96	2 18	22 14
Muskegon	84	65	63	2	1	28	5	----	----	28 50	3 62	32 12
Negaunee	68	50	42	1	1	25	------	----	----	26 50	2 23	28 73
Owosso	74	53	49	2	1	20	------	19	----	25 80	4 21	30 01
Paw Paw	114	80	74	1	3	24	36	----	----	20 00	2 50	22 50
Pontiac	167	118	113	1 ½	3	27	50	----	----	23 00	3 24	26 24
Romeo	72	56	53	1	1	28	30	17	5	28 27	2 64	30 91
Saginaw	101	83	80	1	2	28	17	18	----	23 30	2 38	25 68
St. Clair	79	60	53	1	1	30	13	16	7	20 80	1 82	22 62
St. Johns	50	43	38	1	1	22	15	17	6	22 00	2 44	24 44
St. Joseph	60	40	37	½	1	27	9	18	5	21 25	2 24	23 49
Saugatuck	26	12	11	4-5	¾	12	4	16	2	31 00	2 54	33 54
Spring Lake	87	68	56	1	1	34	8	16	----	6 24	1 56	7 80
Tecumseh	58	48	45	1	1	24	26	18	6	24 61	3 55	28 16
Wayne	90	68	------	1	1	34	38	----	----	12 50	1 12	13 62
Whitehall	22	20	17	1	-------	20	2	17	4	30 00	1 80	31 80
White Pigeon	87	75	70	1	1	37	35	17	6	18 31	2 06	20 37
Wyandotte	41	30	27	-------	1	30	24	17	----	9 50	1 88	11 38
Ypsilanti	67	43	40	3	1	11	15	----	----	40 00	4 58	44 58

TABLE XVIII.

Statistics of the Grammar Department of Fifty-Seven Graded School Districts, Compiled from Reports of Superintendents and Principals for the Year ending June 25, 1880.

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	Average No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Average Age of Class Promoted		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita for Education.
								Years.	Months.			
Adrian	500	400	369	2-5	10	40	6	14	....	$11 10	$2 75	$13 85
Allegan	170	132	125	1-10	3 ½	39	16	15	11	10 26	3 13	13 39
Almont	114	77	75	1	1	38	.....	14	9	10 45	4 86	15 31
Alpena	196	146	110	.....	4	36	.....	12	....	10 62	3 51	14 13
Ann Arbor	615	456	436	4	10 ½	43	53	14	....	12 39	2 91	15 30
Battle Creek	440	381	356	.....	10	38	29	14	....	10 02	3 44	13 46
Benton Harbor	91	65	59	.....	2	32	9	....	....	10 62	2 75	13 37
Big Rapids	503	301	258	.....	5	60	.....	14	....	6 00	2 90	8 90
Birmingham	69	41	25	1	.....	41	25	15	....	7 38	1 98	9 36
Brighton	95	73	69	.....	2	36	1	13	7	8 72	2 73	11 45
Cadillac	88	76	68	.....	2	38	1	13	4	10 04	2 34	12 38
Caro	80	56	54	.....	1	56	.....	....	....	9 41	2 16	11 57
Charlotte	262	210	197	.....	5	42	14	14	6	11 19	3 05	14 24
Coldwater	229	170	162	½	5	34	10	....	....	13 03	3 18	16 21
Constantine	148	125	106	.....	3	42	.....	13	....	8 60	1 50	10 10
Decatur	152	114	100	.....	3	38	10	15	3	6 80	2 71	9 51
Detroit	4,516	3,278	3,100	3	93 ½	34	.....	14	8	16 85	3 19	20 04
East Saginaw	913	687	645	1	16	43	3	14	6	12 07	3 51	15 58
Fenton	242	187	173	1-6	3	47	15	13	6	8 59	2 58	11 17
Grand Haven	172	100	92	.....	3 ¼	31	4	14	4	15 12	2 96	18 08
Grand Rapids	1,734	1,362	1,285	2	38	35	.....	14	....	12 26	2 25	14 51
Greenville	199	141	132	.....	4	35	5	14	....	11 29	6 16	17 45
Hancock	119	105	88	1	2	35	7	12	....	16 19	3 75	19 94
Hastings	208	131	95	.....	3	44	2	....	....	5 72	2 69	8 41
Holly	96	74	71	.....	2	37	3	....	....	6 79	2 37	9 16
Houghton	164	146	136	1	2	49	1	....	....	13 35	5 94	19 29
Howell	178	151	142	.....	4	38	8	15	4	10 38	3 25	13 63
Hudson	150	99	94	.....	2	47	2	....	....	15 78	2 43	18 21
Jonesville	109	71	62	1	1	35	13	14	3	7 88	4 20	12 08
Kalamazoo	497	436	403	½	15	29	16	15	4	14 37	2 27	16 64
Lansing	389	309	273	1	8	36	.....	....	....	12 30	4 63	16 93
Lapeer	179	133	127	.....	3	44	8	14	9	7 94	2 50	10 44
Ludington	200	156	141	½	3	45	8	13	....	7 94	1 49	9 43
Manchester	194	129	54	.....	2	64	11	13	....	5 27	1 49	6 76
Midland, No. 3	78	71	53	.....	2	35	.....	....	....	6 66	3 33	9 99
Monroe	162	100	95	.....	2	50	20	15	5	6 00	2 80	8 80
Montague	70	60	42	.....	1	60	2	....	....	5 00	1 70	6 70
Morenci	85	72	68	.....	2	36	5	12	....	4 13	1 00	5 13
Mount Clemens	154	115	108	.....	2	58	4	14	6	6 57	2 18	8 75
Muskegon	244	166	162	.....	6	28	4	....	....	16 03	3 62	19 65
Negaunee	333	245	198	.....	4 ½	54	.....	....	....	9 30	2 23	11 53
Owosso	220	158	147	.....	4	39	.....	15	2	8 83	4 21	13 04
Paw Paw	106	79	74	.....	3	24	7	....	....	12 00	2 50	14 50
Pontiac	250	200	196	½	5	40	10	....	....	10 50	3 24	13 74
Romeo	126	100	97	1	1	50	17	14	....	10 56	2 64	13 20
Saginaw	430	330	315	1	7	41	7	14	....	14 44	2 38	16 82
St. Clair	120	91	85	1	1	45	7	....	....	7 14	1 82	8 96
St. Johns	200	138	125	1	3	34	10	13	10	9 56	2 12	11 68
St. Joseph	202	181	164	.....	8 ½	40	.....	14	2	8 37	2 24	10 61
Saugatuck	114	69	63	1-10	2 1-6	35	2	14	8	10 19	2 54	12 73
Spring Lake	153	131	105	.....	3	43	1	14	....	7 18	62	7 80
Tecumseh	211	168	160	.....	4	42	11	15	1	11 06	3 55	14 61
Wayne	94	81	.....	.....	2	40	4	....	....	8 01	1 12	9 13
Whitehall	108	72	65	½	2	30	1	14	8	13 12	1 80	14 92
White Pigeon	50	40	37	1	.....	40	9	12	....	9 38	2 06	11 44
Wyandotte	164	137	131	.....	3	46	7	13	....	9 03	1 88	10 91
Ypsilanti	399	249	218	1	6	38	2	....	....	10 72	4 58	15 30

TABLE XIX.

stics of the Primary Department of Fifty-Seven Graded School Districts, Compiled ɔm Reports of Superintendents and Principals, for the Year ending June 25, 1880.

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	Average No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Average Age of Class Promoted		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita for Education.
								Years.	Months.			
ın	575	534	495	1-10	13	41	3	10	....	$9 17	$2 75	$11 92
;an	367	249	237	1-10	6 ½	39	.....	11	6	6 61	3 13	9 74
ınt	138	89	69	.....	2	44	.....	11	6	8 52	4 86	13 38
na	585	447	336	1	5	74	.....	8	....	5 92	3 51	9 43
Arbor	1,880	709	677	.....	14	51	37	10	....	7 82	2 91	10 73
e Creek	571	426	395	.....	10	49	.....	10	8	8 35	3 44	11 79
on Harbor	251	174	154	.....	4	43	3	....	....	7 82	2 75	10 57
tapids	339	307	276	.....	5	61	.....	10	....	5 09	2 90	7 99
ingham	202	131	116	.....	2	29	.....	12	....	4 68	1 98	6 66
ıton	104	71	63	.....	2	35	2	9	5	6 57	2 73	9 30
lac	155	125	112	.....	2	63	2	9	1	6 37	2 34	8 71
	207	129	115	.....	2	64	.....	....	....	4 63	2 16	6 79
lotte	402	282	237	.....	6	43	2	10	....	9 07	3 05	12 12
water	706	464	425	½	13	36	4	....	....	10 89	3 18	14 07
tantine	127	110	99	.....	2	55	.....	....	....	9 80	1 50	11 30
tur	118	89	.....	.....	2	44	1	9	6	7 10	2 71	9 81
oit	11,128	7,630	7,126	1	130	52	.....	11	4	10 28	3 19	13 47
Saginaw	1,910	1,407	1,343	1	29	45	.....	10	9	9 25	3 51	12 76
on	256	215	198	1-6	4	54	.....	9	6	6 77	2 58	9 35
d Haven	859	591	526	.....	12	49	5	11	6	7 01	2 96	9 97
d Rapids	3,327	2,142	1,937	2	47 ½	45	.....	10	6	10 38	2 25	12 63
nville	444	286	258	.....	6	48	2	9	....	7 26	6 16	13 42
ock	250	225	182	.....	3	75	8	9	....	6 88	3 75	10 63
ings	383	301	284	.....	5	60	3	....	....	4 15	2 69	6 84
r	198	140	123	.....	3	46	.....	8	....	4 29	2 37	6 66
;hton	487	364	341	.....	7	52	.....	....	....	7 20	5 94	13 14
ell	280	186	173	.....	4	47	1	11	1	7 38	3 25	10 63
ion	212	161	141	.....	3	54	.....	....	....	5 57	2 43	8 00
sville	157	97	91	.....	2	48	2	10	3	5 16	4 20	9 36
mazoo	1,449	985	906	½	23	49	2	11	3	9 24	2 27	11 51
ing	1,084	646	615	.....	17	38	.....	....	....	9 35	4 63	13 98
er	432	288	270	.....	8	36	4	11	6	9 43	2 50	11 93
ngton	588	360	295	½	5	65	2	10	..	7 03	1 49	8 52
chester	182	150	85	.....	2	75	.....	9	....	4 26	1 28	5 54
and, No. 3	220	200	171	.....	4	50	.....	....	....	5 00	3 33	8 33
oe	191	130	110	.....	2	55	3	10	8	4 61	2 80	7 41
ague	251	159	121	.....	3	53	4	....	....	3 32	1 70	5 02
ncl	194	150	141	.....	3	50	.....	8	....	2 68	1 93	4 61
t Clemens	281	180	169	.....	4	48	.....	10	1	6 95	2 18	9 13
egon	1,390	812	762	.....	20	41	.....	....	....	10 00	3 62	13 62
unee	521	381	279	.....	5 ½	69	.....	....	....	6 81	2 23	9 04
so	331	217	198	.....	4	54	.....	10	7	6 63	4 21	10 84
Paw	177	144	138	.....	3	46	1	....	....	5 00	2 50	7 50
lac	522	373	356	½	9	41	2	....	....	10 00	3 24	13 24
so	259	184	172	.....	4	46	1	10	4	6 60	2 64	9 24
aw	1,245	881	833	1	17	49	1	10	5	8 15	2 38	10 53
lair	278	230	196	.....	5	46	3	9	3	6 13	1 82	7 95
ohns	389	278	253	.....	6	49	6	10	3	7 48	2 12	9 60
oseph	388	237	219	.....	4 ½	53	.....	9	8	6 20	2 24	8 44
atuck	166	110	96	1-10	2 1-6	45	.....	11	4	6 56	2 54	9 10
g Lake	169	122	96	.....	2	61	.....	10	....	7 05	62	7 67
mseh	220	171	156	.....	4	43	.....	10	3	9 60	3 55	13 15
ne	201	136	120	.....	2	68	3	8	....	4 79	1 12	5 91
ehall	213	133	119	.....	3	44	.....	11	....	7 23	1 80	9 03
e Pigeon	193	156	144	.....	3	52	6	9	....	6 02	2 06	8 08
ndotte	422	346	312	.....	7	50	.....	8	5	6 30	1 88	8 18
lanti	733	525	477	1	10	48	1	....	....	8 71	4 58	13 29

TABLE XX.

Enrollment at Teachers' Institutes, for the Calendar Year, 1880.

Counties.	Conductors.	Number Enrolled.			Grades of Certificates held by Members.					No. that have Attended Normal School.	No. without Experience in Teach'g.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.		
Allegan	E. P. Church	46	91	137	1	------	10	19	31	14	3
Alpena	T. W. Crissey	5	41	46	------	1	5	15	9	11	1
Antrim	T. W. Crissey	11	21	32	------	------	5	8	11	9	1
Baraga	Austin George	22	25	47	------	1	4	3	6	4	2
Barry	A. J. Daniels	18	36	54	------	3	6	6	20	6	2
Bay	Z. C. Spencer	10	13	23	------	------	3	7	7	3	1
Benzie	P. A. Latta	13	35	48	------	------	8	7	11	7	2
Berrien	Austin George	28	77	105	1	3	25	24	27	16	2
Branch	Edward Olney	26	82	108	1	------	13	26	41	15	2
Calhoun	R. W. Putnam	20	63	83	------	2	8	22	30	15	1
Cass	E. G. Walker	42	79	121	------	3	14	28	23	15	3
Charlevoix, Manitou	Edward Olney	5	20	25	------	------	2	17	13	10	1
Cheboygan	C. F. R. Bellows	9	23	32	------	------	7	10	7	8	1
Chippewa, Mackinac	Zelotes Truesdel	2	11	13	------	------	2	5	6	2	1
Clare, Gladwin	Lewis McLouth	2	8	10	------	------	1	1	4	------	1
Clinton	J. W. Ewing	47	78	125	2	1	15	28	28	10	4
Delta, Menominee	Austin George	9	34	43	------	------	5	8	10	5	2
Eaton	E. G. Walker	35	67	102	------	------	7	15	39	13	4
Emmet	C. F. R. Bellows	8	23	31	------	1	7	10	8	5	1
Genesee	C. B. Thomas	32	43	75	------	------	14	20	15	7	2
G'd Traverse	P. A. Latta	11	34	45	1	------	11	12	14	12	1
Gratiot	R. W. Putnam	20	64	84	------	1	16	29	14	14	2
Hillsdale	Daniel Putnam	23	57	80	1	1	19	25	13	16	2
Houghton	Lewis McLouth	40	14	54	------	2	9	13	10	19	2
Huron	Joseph Estabrook	4	16	20	1	2	3	9	2	5	1
Ingham	Lewis McLouth	28	73	101	------	3	10	15	25	23	4
Ionia	J. W. Ewing	59	65	124	1	3	28	18	34	18	4
Iosco	T. W. Crissey	3	34	37	------	4	5	5	2	7	2
Isabella	Z. C. Spencer	10	40	50	------	1	8	4	14	4	2
Jackson	A. J. Daniels	23	63	86	------	5	7	12	24	12	3
Kalamazoo	Frank Peavey	21	51	72	------	2	3	14	20	8	2
Kalkaska	J. W. Ewing	15	44	59	1	------	11	13	7	9	2
Kent	E. P. Church	39	68	107	2	------	19	34	26	22	2
Lake	Edward Olney	2	17	19	------	------	1	7	7	3	1
Lapeer	Joseph Estabrook	35	81	116	------	4	15	22	51	8	2
Leelanaw	R. W. Putnam	10	19	29	------	------	3	6	7	2	2
Lenawee	Z. C. Spencer	49	112	161	1	8	18	53	35	37	6
Livingston	C. F. R. Bellows	47	54	101	1	------	9	13	35	8	4
Macomb	Daniel Putnam	32	42	74	1	------	22	18	18	6	1
Manistee	Daniel Putnam	8	42	50	------	4	15	7	5	9	1
Marquette	Lewis McLouth	9	73	82	4	3	31	22	5	21	1
Mecosta	W. H. Payne	10	66	76	------	1	9	23	25	10	1
Midland	E. B. Fairfield, Jr.	8	32	40	------	------	7	9	8	3	1
Missaukee	Austin George	18	9	27	------	------	2	4	6	4	1
Monroe	W. H. Payne	15	50	65	------	2	5	13	6	9	2
Montcalm	C. B. Thomas	13	30	43	------	------	7	15	12		1
Muskegon	T. W. Crissey	14	37	51	------	3	7	18	9	5	1
Newaygo	N. H. Walbridge	14	40	54	1	1	8	12	10	8	2
Oakland: Milford	Zelotes Truesdel	27	67	94	1	5	9	26	35	20	1
Oakland: Oxford	Daniel Putnam	29	33	62	2	------	15	17	9	12	2
Oceana, Mason	W. H. Payne	12	72	84	------	1	6	31	10	10	2

TABLE XX.—*Continued.*

Counties.	Conductors.	Number Enrolled.			Grades of Certificates held by Members.					No. that have Attended Normal School.	No. without Experience in Teach'g.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.		
Ontonagon	Lewis McLouth	4	21	25	------	------	1	8	3	--------	13
Osceola	I. N. Demmon	22	52	74	1	------	5	10	11	5	43
Otsego	R. W. Putnam	15	23	38	------	------	6	10	8	4	14
Ottawa	E. P. Church	45	68	113	------	4	20	28	34	9	24
Saginaw	W. H. Payne	19	33	52	1	------	3	13	13	6	21
St. Clair	O. D. Thompson	23	58	81	------	------	9	17	42	4	17
St. Joseph	C. F. R. Bellows	30	100	130	1	7	12	27	39	24	41
Sanilac	P. A. Latta	23	27	50	------	------	4	9	23	--------	14
Shiawassee	Austin George	40	62	102	1	3	7	4	42	13	41
Tuscola	J. C. Jones	27	43	70	------	------	15	25	14	15	13
Van Buren	E. P. Church	27	73	100	------	1	21	21	36	10	21
Washtenaw	Lewis McLouth	45	69	114	------	40	18	17	16	88	22
Wayne	Joseph Estabrook	35	59	94	------	13	9	18	22	28	32
Wexford	P. A. Latta	10	22	32	------	------	10	4	4	5	14
Totals...65	----------	1,403	3,079	4,482	27	139	619	1,009	1,145	744	1,488

TABLE XXI.

Receipts and Expenditures at Teachers' Institutes, for the Calendar Year, 1880.

Counties.	Where Held.	Dates.	Receipts.			Expenditures.		
			County Fund.	State Appropriation.	Total.	Paid Instructors.	Other Expenses.	Total.
Allegan	Wayland	Mar. 29-Apr. 2	$124 95	--------	$124 95	$92 35	$32 60	$124 95
Alpena	Alpena	Oct. 18-22	23 25	$60 00	83 25	73 29	9 96	83 25
Antrim	Mancelona	Sept. 13-17	34 09	60 00	94 00	78 79	15 21	94 00
Baraga	L'Anse	Aug. 30-Sept. 3	21 00	60 00	81 00	72 40	8 60	81 00
Barry	Middleville	Aug. 30-Sept. 3	183 30	--------	183 30	148 50	34 80	183 30
Bay	Standish	Aug. 16-20	58 00	60 00	118 00	101 12	16 88	118 00
Benzie	Frankfort	Sept. 20-24	34 50	60 00	94 50	82 25	12 25	94 50
Berrien	Buchanan	Aug. 16-20	170 48	--------	170 48	140 83	29 65	170 48
Branch	Quincy	Mar. 29-Apr. 2	113 00	--------	113 00	77 75	35 25	113 00
Calhoun	Battle Creek	Mar. 29-Apr. 3	194 57	--------	194 57	144 90	49 67	194 57
Cass	Vandalia	Aug. 30-Sept. 3	149 00	--------	149 00	120 95	28 05	149 00
Charlevoix, Manitou	Charlevoix	Sept. 6-10	28 50	60 00	88 50	75 50	13 00	88 50
Cheboygan	Cheboygan	Aug. 23-27	25 00	60 00	85 00	72 50	12 50	85 00
Chippewa, Mackinac	Sault Ste Marie	Aug. 16-20	11 00 / 13 00	60 00	84 00	75 00	9 00	84 00
Clare, Gladwin	Farwell	Sept. 6-10	40 00 / 4 50	60 00	104 50	88 70	15 80	104 50
Clinton	Maple Rapids	Mar. 29-Apr. 2	119 65	--------	119 65	92 90	26 75	119 65
Delta, Menominee	Escanaba	Aug. 23-27	12 00 / 18 00	60 00	90 00	76 40	13 60	90 00
Eaton	Vermontville	Aug. 23-27	174 15	--------	174 15	136 75	37 40	174 15
Emmet	Little Traverse	Aug. 30-Sept. 3	36 00	60 00	96 00	83 40	12 60	96 00
Genesee	Flushing	Aug. 23-27	188 80	--------	188 80	158 60	30 20	188 80
G'd Traverse	Traverse City	Aug. 30-Sept. 3	63 50	60 00	123 50	110 19	13 31	123 50
Gratiot	St. Louis	Aug. 30-Sept. 3	103 05	60 00	163 05	140 89	22 16	163 05
Hillsdale	Jonesville	Aug. 30-Sept. 3	199 50	--------	199 50	162 00	37 50	199 50
Houghton	Calumet	Aug. 30-Sept. 3	64 50	60 00	124 50	104 60	19 90	124 50
Huron	Sand Beach	Sept. 6-10	67 50	60 00	127 50	110 50	17 00	127 50
Ingham	Williamston	Mar. 29-Apr. 2	132 78	--------	132 78	102 80	29 98	132 78
Ionia	Portland	Aug. 23-27	194 48	--------	194 48	158 55	35 93	194 48
Iosco	East Tawas	Oct. 11-15	19 50	60 00	79 50	66 80	12 70	79 50

TABLE XXI.—*Continued.*

Counties.	Where Held.	Dates.	Receipts.			Expenditures.		
			County Fund.	State Appropriation.	Total.	Paid Instructors.	Other Expenses.	Total
Isabella	Mt. Pleasant	Aug. 30-Sept. 3	$62 87	$60 00	$122 87	$103 86	$19 01	$122
Jackson	Brooklyn	Aug. 23-27	146 00		146 00	118 07	27 93	146
Kalamazoo	Galesburg	Aug. 23-27	196 70		196 70	167 30	29 40	196
Kalkaska	Kalkaska	Aug. 16-20	29 00	60 00	89 00	76 05	12 95	89
Kent	Rockford	Aug. 16-20	163 54		163 54	129 91	33 63	163
Lake	Baldwin City	Sept. 13-17	96 00	60 00	156 00	130 70	25 30	156
Lapeer	Lapeer	Mar. 29-Apr. 2	136 00		136 00	104 15	31 85	136
Leelanaw	Northport	Aug. 23-27	39 00	60 00	99 00	89 45	9 55	99
Lenawee	Tecumseh	Mar. 29-Apr. 2	183 76		183 76	153 96	50 80	183
Livingston	Brighton	Oct. 18-22	145 26		145 26	121 35	23 91	145
Macomb	Utica	Aug. 23-27	112 50		112 50	88 31	24 19	112
Manistee	Manistee	Oct. 25-29	60 50	50 00	110 50	94 55	15 95	110
Marquette	Negaunee	Oct. 11-15	50 00	60 00	110 00	96 55	13 45	110
Mecosta	Big Rapids	Mar. 29-Apr. 2	86 44		86 44	73 05	13 39	86
Midland	Midland City	Aug. 23-27	35 50	60 00	95 50	86 16	9 34	95
Missaukee	Lake City	Sept. 6-10	61 50	60 00	121 50	95 75	25 75	121
Monroe	Petersburg	Oct. 4-8	118 00		118 00	92 50	25 50	118
Montcalm	Stanton	Aug. 16-20	143 57		143 57	116 57	27 00	143
Muskegon	Whitehall	Aug. 30-Sept. 3	76 00	60 00	136 00	110 77	25 23	136
Newaygo	Newaygo	Oct. 25-29	64 00	31 77	95 77	83 37	12 40	95
Oakland	Milford	Mar. 29-Apr. 2	138 15		138 15	100 10	38 05	138
Oakland	Oxford	Aug. 16-20	171 30		171 30	135 95	35 35	171
Oceana / Mason	Pentwater	Apr. 5-9	51 00 / 34 00	32 23	117 23	89 35	27 88	117
Ontonagon	Ontonagon	Aug. 23-27	42 50	60 00	102 50	88 05	14 45	102
Osceola	Evart	Sept. 13-17	65 00	46 00	111 00	88 15	22 85	111
Otsego	Gaylord	Aug. 16-20	13 00	60 00	73 00	65 95	7 05	73
Ottawa	Holland	Aug. 30-Sept. 3	151 35		151 35	122 50	28 85	151
Saginaw	Chesaning	Aug. 30-Sept. 3	146 92		146 92	128 45	18 47	146
St. Clair	Capac	Aug. 30-Sept. 3	131 70		131 70	94 25	37 45	131
St. Joseph	Three Rivers	Aug. 16-20	173 50		173 50	138 70	34 80	173
Sanilac	Marlette	June 7-11	114 00		114 00	91 50	22 50	114
Shiawassee	Vernon	Oct. 4-8	140 00		140 00	122 50	17 50	140
Tuscola	Vassar	Oct. 11-15	107 12	20 00	127 12	111 61	15 51	127
Van Buren	Paw Paw	Aug. 23-27	167 00		167 00	133 56	33 44	167
Washtenaw	Ypsilanti	Aug. 16-20	165 35		165 35	138 70	26 65	165
Wayne	Northville	Aug. 23-27	185 00		185 00	151 60	33 40	185
Wexford	Sherman	Apr. 19-23	43 00	60 00	103 00	89 85	13 15	103
Totals			$6,667 49	$1,800 00	$8,467 49	$6,951 36	$1,516 13	$8,467

General Statistics of State and Incorporated Educational Institutions, Compiled from the Reports of Presiding Officers for the Academic Year 1879-80.

Name of Institution.	Location.	Date of Charter or Organization.	Religious Denomination.	Name of Principal, President, or Superintendent.	Number of Instructors.	No. of Students during Year.	No. of Graduates at Last Commencement.	Whole No. of Graduates since Founded.	No. of Volumes in Library.	No. of Volumes added to Library during Year.
State:										
University of Michigan	Ann Arbor	1841	Non sectarian	Jas. B. Angell	52	1,430	410	6,166	36,482	1,982
Agricultural College	Lansing	1855	Non-sectarian	T. C. Abbot	12	264	25	211	5,844	558
Normal School	Ypsilanti	1852	Non-sectarian	Malcom MacVicar	12	462	56	843	2,383	10
Institution for the Deaf and Dumb	Flint	1854	Non-sectarian	Thos. MacIntire	12	250	20	519	2,038	360
School for the Blind [a]	Lansing	1880	Non-sectarian	J. F. McElroy	---	---	---	---	---	---
Reform School	Lansing	1856	Non-sectarian	F. M. Howe	7	493	---	---	2,840	256
Public School for Dependent Children	Coldwater	1874	Non-sectarian	Lyman P. Alden	6	454	---	---	894	80
Incorporated:										
Adrian College	Adrian	March 22, 1859	Methodist Protestant	M. B. Taylor	9	199	13	203	3,000	1,200
Albion College	Albion	Feb. 15, 1861	Methodist Episcopal	L. R. Fiske	11	244	23	130	2,500	80
Battle Creek College	Battle Creek	March 11, 1874	Seventh Day Adventist	James White	14	489	10	14	800	200
Grand Traverse College	Benzonia	April 11, 1863	Congregational	L. D. Maltby	2	40	---	---	320	20
Hillsdale College	Hillsdale	July 17, 1855	Free-Will Baptist	D. W. C. Durgin	15	608	19	440	7,000	150
Hope College	Holland	May 14, 1866	Reform Dutch	G. H. Mandeville	8	121	10	81	4,700	172
Kalamazoo College	Kalamazoo	1855	Baptist	Kendall Brooks	7	147	9	129	3,200	23
Olivet College	Olivet	August 8, 1859	Congregational and Presbyterian	Horatio Q. Butterfield	12	201	5	133	7,000	250
German-American Seminary	Detroit	Jan. 25, 1861	Non-sectarian	W. N. Hallmann	6	171	---	---	500	---
Michigan Female Seminary	Kalamazoo	Dec. 15, 1856	Presbyterian	Mrs. Esther E. Thompson	10	44	4	76	640	---
Michigan Military Academy	Orchard Lake	Sept. 4, 1877	Non-sectarian	J. Sumner Rogers	6	97	6	14	560	---
Raisin Valley Seminary	Adrian	April 27, 1863	Friends	Erastus Test	3	99	7	35	200	---
Spring Arbor Seminary	Spring Arbor	May 1, 1874	Free Methodist	Clark Jones	4	105	---	---	---	---

[a] School organized too late to be included in this report.

TABLE XXIII.

Financial Statistics of State and Incorporated Educational Institutions, Compiled from the Reports of Presiding Officers for the Academic Year 1879–80.

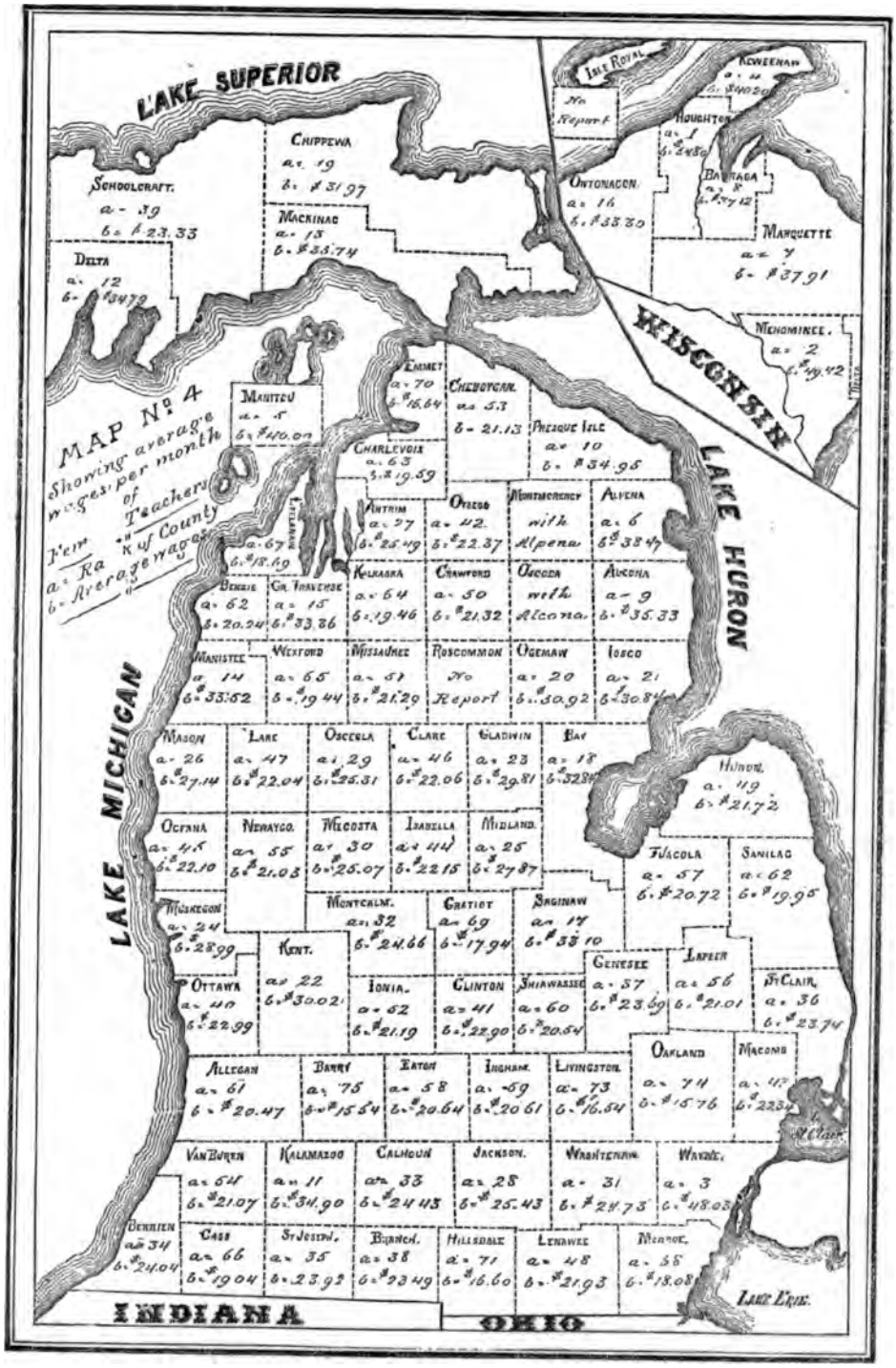
Institution.	Annual Cost of Tuition per Student.	Av. Cost of Board per Week.	Total Av. Annual Cost per Student,—(to the Student)	Total Av. Annual Cost per Student,—(to the State).	Estimated Value of Grounds, Buildings, Apparatus, etc.	Amount of Productive Funds.	Income from Productive Funds.	Amount of Legislative Appropriation for Year 1880.	Receipts from Tuition Fees during Year.	Receipts from all other Sources.	Current Expenses for the Year.	Expenses for Permanent Improvements.	Liabilities.
State:													
University of Michigan	[a] $20 00	$2 50	$200 00	$32 51	$681,442 00	$458,655 96	$38,643 83	$64,250 00	$60,911 33	$2,298 50	$136,130 29	$77,994 19	.....
Agricultural College	.....	2 38	90 00	.....	274,380 16	301,833 86	17,799 15	12,040 12	.....	11,823 11	33,309 74	9,461 91	.....
Normal School	10 00	2 50	120 00	38 38	85,000 00	68,966 04	4,333 52	17,500 00	1,742 50	259 00	24,066 62	.....	.....
Institution for the Deaf and Dumb	.....	.....	.....	162 54	277,525 00	.....	.....	41,925 33	425 00	4,293 98	46,354 34	1,925 33	.....
School for the Blind [b]	.....	.....	.....	.....	.....	.....	.....	10,000 00	.....	.....	.....	.....	.....
Reform School	.....	65	.....	96 00	264,531 15	.....	.....	35,500 00	.....	12,628 46	32,903 38	3,942 30	.....
Public School for Dependent Children	.....	.....	.....	122 23	190,000 00	.....	.....	36,000 00	.....	.....	35,000 00	.....	.....
Incorporated:													
Adrian College	15 00	2 25	.....	.....	133,000 00	83,878 70	3,867 47	.....	1,878 23	3,579 60	14,867 56	358 14	$31,467 24
Albion College	.....	2 50	.....	.....	50,000 00	170,000 00	12,700 00	.....	4,300 00	.....	15,500 00	1,000 00	15,000 00
Battle Creek College	16 80	2 00	.....	.....	52,040 70	.....	.....	.....	5,031 32	7,634 25	8,000 00	1,054 29	5,692 10
Grand Traverse College	15 00	2 50	.....	.....	40,000 00	10,000 00	800 00	.....	150 00	.....	900 00	300 00	1,500 00
Hillsdale College	10 50	1 75	.....	.....	125,000 00	120,000 00	11,000 00	.....	.....	.....	12,000 00	500 00	10,000 00
Hope College	12 00	2 50	.....	.....	45,000 00	69,500 00	4,282 62	.....	1,238 00	3,668 03	8,812 72	.....	25,170 08
Kalamazoo College	18 00	3 00	.....	.....	100,000 00	64,036 20	4,065 73	.....	2,450 00	1,100 00	7,536 45	.....	13,654 00
Olivet College	15 21	2 00	.....	.....	113,000 00	116,036 63	6,925 93	.....	3,224 06	7,335 12	13,587 36	1,635 43	16,867 68
German-American Seminary	[c] 20 00	.....	.....	.....	[c] 25,000 00	[c] 3,000 00	[c] 263 00	.....	[c] 2,796 48	[c] 504 16	[c] 6,085 16	.....	.....
Michigan Female Seminary	[d] 175 00	.....	.....	.....	50,000 00	.....	.....	.....	7,490 34	.....	8,000 00	.....	.....
Michigan Military Academy	[d] 350 00	.....	.....	.....	50,000 00	.....	.....	.....	28,000 00	.....	.....	1,000 00	.....
Raisin Valley Seminary	22 00	2 50	.....	.....	10,000 00	25,000 00	1,800 00	.....	1,500 00	200 00	3,300 00	.....	.....
Spring Arbor Seminary	9 66	2 25	.....	.....	6,000 00	.....	.....	.....	1,014 31	.....	1,100 00	.....	700 00

[a] Not properly tuition but tax for incidental expenses; to students coming from outside the State, this tax is $25.
[b] School organized too late to be included in this report.
[c] From report for 1878–9, these items not being reported the current year.
[d] Including board.

LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
WISCONSIN
INDIANA
OHIO
LAKE ERIE
MAP No 1
Showing percent of enrollment on the School Census.
a = Rank of County
b = Per. Cent.
Isle Royal
No Report
Keweenaw a = 30 b = 70.05
Houghton a = 71 b = 56.13
Ontonagon. a = 24 b = 80.02
Baraga a = 55 b = 67.93
Marquette a = 54 b = 68.00
Menominee. a 73 b = 51.65
Schoolcraft a = 51 b = 69.12
Chippewa a = 75 b = 34.26
Mackinac a = 70 b = 56.90
Delta a = 45 b = 74.02
Manitou. a = 60 b = 64.06.
Emmet a = 64 b = 62.09
Cheboygan. a = 58 b = 66.28
Presque Isle a = 66 b = 59.85
Charlevoix a = 49 b = 7009
Antrim a = 18 b = 51.83
Otsego a = 38 b = 76.69
Montmorency with Alpena
Alpena a = 69 b = 58.36
Leelanaw a = 57 b = 67.55
Benzie. a = 39 b = 76.66
Gr. Traverse a = 15 b = 82.84
Kalkaska a = 11 b = 83.86
Crawford a = 2 b = 86.86
Oscoda with Alcona
Alcona a = 52 b = 68.35
Manistee. a = 59 b = 64.18
Wexford a = 23 b = 80.38
Missaukee a = 3 b = 86.30
Roscommon No Report
Ogemaw a = 9 b = 84.17
Iosco a = 72 b = 54.99
Mason a = 35 b = 77.52
Lake a = 16 b = 82.63
Osceola a = 44 b = 73.98
Clare. a = 41 b = 75.13
Gladwin a = 46 b = 72.22
Bay a = 67 b = 59.80
Huron. a = 63 b = 62.48
Oceana a = 30 b = 78.43
Newayco. a = 42 b = 74.95
Mecosta. a = 32 b = 77.99
Isabella a = 37 b = 77.38
Midland a = 31 b = 78.08
Tuscola a = 40 b = 75.20
Sanilac a = 48 b = 70.79
Muskegon a = 65 b = 60.22
Montcalm. a = 36 b = 77.47
Gratiot a = 14 b = 82.99
Saginaw a = 68 b = 59.16
Kent. a = 33 b = 68.32
Genesee a = 17 b = 82.44
Lapeer a = 26 b = 79.58
St Clair. a = 56 b = 67.84
Ottawa a = 45 b = 73.56
Ionia. a = 21 b = 81.02
Clinton a = 19 b = 81.54
Shiawassee a = 22 b = 80.67
Oakland. a = 4 b = 86.06
Macomb. a = 61 b = 62.99
Allegan a = 27 b = 79.18
Barry a = 5 b = 86.77
Eaton a = 8 b = 84.33
Ingham. a = 34 b = 77.90
Livingston. a = 6 b = 85.15
St Clair
Van Buren a = 12 b = 83.82
Kalamazoo a = 28 b = 78.53
Calhoun a = 20 b = 81.20
Jackson. a = 29 b = 78.50
Washtenaw a = 33 b = 77.92
Wayne. a = 74 b = 46.67
Berrien. a = 25 b = 79.97
Cass a = 7 b = 84.46
St Joseph. a = 13 b = 83.55
Branch. a = 1 b = 87.97
Hillsdale a = 10 b = 84.13
Lenawee a = 47 b = 72.21
Monroe. a = 62 b = 62.72

LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
WISCONSIN
INDIANA
OHIO
LAKE ERIE
MAP No 2.
Showing average number of months school during the year.
a = Rank of County
b = Average months school
Isle Royal
No Report
Keweenaw
a- 6
b- 8.3
Houghton
a- 1
b- 9.8
Ontonagon
a- 2
b- 9.1
Baraga
a- 55
b- 6.6
Marquette
a- 29
b- 7.6
Menominee
a- 33
b- 7.5
Chippewa
a- 54
b- 6.7
Schoolcraft
a- 43
b- 7.1
Mackinac
a- 70
b- 5.5
Delta
a- 65
b- 5.9
Emmet
a- 74
b- 5.1
Cheboygan
a- 60
b- 6.1
Presque Isle
a- 75
b- 4.2
Manitou
a- 57
b- 6.5
Charlevoix
a- 62
b- 6.0
Antrim
a- 59
b- 6.2
Otsego
a- 68
b- 5.7
Montmorency
with
Alpena
Alpena
a- 55
b- 6.6
Cheboygan
a- 70
b- 5.5
Kalkaska
a- 62
b- 6.0
Crawford
a- 60
b- 6.1
Oscoda
with
Alcona
Alcona
a- 40
b- 7.2
Benzie
a- 65
b- 5.9
Gr. Traverse
a- 50
b- 6.8
Manistee
a- 43
b- 7.1
Wexford
a- 58
b- 6.4
Missaukee
a- 69
b- 5.6
Roscommon
No
Report
Ogemaw
a- 73
b- 5.0
Iosco
a- 65
b- 5.9
Mason
a- 47
b- 6.9
Lake
a- 62
b- 6.0
Osceola
a- 50
b- 6.8
Clare
a- 72
b- 5.4
Gladwin
a- 48
b- 7.0
Bay
a- 33
b- 7.5
Huron
a- 40
b- 7.2
Oceana
a- 50
b- 6.8
Newaygo
a- 47
b- 6.9
Missoula
a- 40
b- 7.2
Isabella
a- 47
b- 6.9
Midland
a- 45
b- 7.0
Tuscola
a- 33
b- 7.5
Sanilac
a- 37
b- 7.4
Muskegon
a- 10
b- 6.8
Montcalm
a- 12
b- 8.0
Gratiot
a- 37
b- 7.4
Saginaw
a- 3
b- 8.9
Kent.
a- 17
b- 7.9
Ottawa
a- 6
b- 8.3
Ionia.
a- 25
b- 7.7
Clinton
a- 11
b- 8.1
Shiawassee
a- 17
b- 7.9
Genesee
a- 25
b- 7.7
Lapeer
a- 12
b- 8.0
St. Clair
a- 20
b- 7.8
Allegan
a- 29
b- 7.6
Barry
a- 29
b- 7.6
Eaton
a- 31
b- 7.4
Ingham
a- 12
b- 8.0
Livingston
a- 20
b- 7.8
Oakland
a- 20
b- 7.8
Macomb
a- 8
b- 8.2
Van Buren
a- 20
b- 7.8
Kalamazoo
a- 5
b- 8.5
Calhoun
a- 25
b- 7.7
Jackson
a- 8
b- 8.2
Washtenaw
a- 8
b- 8.2
Wayne
a- 4
b- 8.6
Berrien
a- 35
b- 7.6
Cass
a- 17
b- 7.9
St. Joseph
a- 12
b- 8.0
Branch
a- 25
b- 7.7
Hillsdale
a- 12
b- 8.0
Lenawee
a- 20
b- 7.8
Monroe
a- 27
b- 7.6

MAP No 3
Showing average wages per month of Male Teachers
a= Rank of County
b= Average Wages
LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
WISCONSIN
INDIANA
OHIO
LAKE ERIE
Isle Royal
No Report
Keweenaw
a= 5
$ 65.29
Houghton
a= 2
$ 80.67
Ontonagon.
a= 3
$ 72.05
Baraga
a= 7
$ 60.28
Marquette
a= 1
$ 86.09
Menominee,
a= 14
$ 69.98
Schoolcraft.
a= 8
$ 60.00
Chippewa
a= 17
$ 43.75
Mackinac
a= 15
$ 49.25
Delta
a= 6
$ 61.01
Emmet
a= 30
$ 36.04
Cheboygan.
a= 22
$ 41.23
Presque Isle
a= 64
$ 29.43
Manitou.
a= 50
$ 30.71
Charlevoix
a= 73
$ 24.51
Antrim
a= 55
$ 31.44
Otsego
a= 65
$ 29.05
Montmorency
with Alpena
Alpena
a= 9
$ 69.43
Leelanau
a= 66
$ 29.04
Kalkaska
a= 67
$ 27.93
Crawford
a= 62
$ 30.30
Oscoda
with Alcona
Alcona
a= 10
$ 58.37
Benzie
a= 35
$ 34.73
Gr. Traverse
a= 45
$ 33.88
Manistee.
a= 20
$ 42.56
Wexford
a= 50
$ 32.78
Missaukee
a= 68
$ 27.27
Roscommon
No. Report
Ogemaw
a= 59
$ 31.09
Iosco
a= 16
$ 48.67
Mason
a= 53
$ 32.16
Lake
a= 74
$ 24.40
Osceola
a= 38
$ 34.29
Clare
a= 48
$ 32.98
Gladwin
No Report
Bay
a= 14
$ 50.36
Huron.
a= 37
$ 34.56
Oceana
a= 49
$ 32.88
Newaygo.
a= 34
$ 34.99
Mecosta.
a= 70
$ 27.01
Isabella
a= 28
$ 36.35
Midland.
a= 51
$ 32.48
Tuscola
a= 43
$ 33.94
Sanilac
a= 63
$ 30.29
Muskegon
a= 12
$ 51.12
Montcalm.
a= 26
$ 37.41
Gratiot
a= 56
$ 31.22
Saginaw
a= 13
$ 50.43
Kent.
a= 19
$ 43.29
Genesee
a= 31
$ 36.02
Lapeer
a= 29
$ 36.14
St Clair.
a= 41
$ 41.10
Ottawa
a= 21
$ 42.52
Ionia.
a= 44
$ 33.91
Clinton
a= 54
$ 32.12
Shiawassee
a= 52
$ 32.26
Oakland.
a= 38
$ 34.29
Macomb.
a= 24
$ 40.2
Allegan
a= 47
$ 33.39
Barry
a= 71
$ 26.83
Eaton
a= 69
$ 27.23
Ingham.
a= 32
$ 36.75
Livingston.
a= 58
$ 31.11
Van Buren
a= 40
$ 34.26
Kalamazoo
a= 36
$ 34.67
Calhoun.
a= 46
$ 33.85
Jackson.
a= 18
$ 43.71
Washtenaw.
a= 23
$ 40.43
Wayne.
a= 11
$ 51.83
Berrien.
a= 27
$ 37.17
Cass
a= 42
$ 34.03
St Joseph.
a= 25
$ 38.17
Branch.
a= 57
$ 31.18
Hillsdale
a= 72
$ 25.69
Lenawee
a= 33
$ 35.51
Monroe.
a= 61
$ 30.46


LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
WISCONSIN
INDIANA
OHIO
LAKE ERIE
MAP No 4
Showing average wages per month of Teachers in Counties
Isle Royal
No Report
Keweenaw
Houghton
Ontonagon
Baraga
Marquette
Schoolcraft
Chippewa
Mackinac
Delta
Menominee
Emmet
Cheboygan
Presque Isle
Manitou
Charlevoix
Antrim
Otsego
Montmorency
Alpena
Benzie
Gr. Traverse
Kalkaska
Crawford
Oscoda
Alcona
Manistee
Wexford
Missaukee
Roscommon
Ogemaw
Iosco
Mason
Lake
Osceola
Clare
Gladwin
Bay
Huron
Oceana
Newaygo
Mecosta
Isabella
Midland
Tuscola
Sanilac
Muskegon
Montcalm
Gratiot
Saginaw
Kent
Genesee
Lapeer
St Clair
Ottawa
Ionia
Clinton
Shiawassee
Allegan
Barry
Eaton
Ingham
Livingston
Oakland
Macomb
St Clair
Van Buren
Kalamazoo
Calhoun
Jackson
Washtenaw
Wayne
Berrien
Cass
St Joseph
Branch
Hillsdale
Lenawee
Monroe

LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
WISCONSIN
INDIANA
OHIO
LAKE ERIE
MAP No 5.
Amount of District Taxes, per capita
School Census
a= Rank of County
b= Tax per capita
Isle Royal
No Report
Keweenaw a. 25 b. $5.45
Houghton a. 15 b. $2.40
Baraga a. 8 b. $7.62
Marquette a. 13 b. $6.46
Ontonagon a. 4 b. $9.53
Chippewa a. 70 b. $2.49
Schoolcraft a. 16 b. $6.30
Mackinac a. 69 b. $2.54
Delta a. 33 b. $.47
Menominee a. 42 b. $4.27
Emmet a. 39 b. $4.41
Cheboygan a. 30 b. $5.06
Presque Isle a. 74 b. $1.52
Manitou a. 75 b. $0.90
Charlevoix a. 28 b. $5.52
Antrim a. 12 b. $6.77
Otsego a. 3 b. $12.47
Montmorency with Alpena
Alpena a. 17 b. $5.99
Leelanau a. 68 b. $3.22
Kalkaska a. 111 b. $6.45
Crawford a. 5 b. $9.35
Oscoda with Alcona
Alcona a. 24 b. $5.46
Benzie a. 37 b. $4.56
Gr. Traverse a. 20 b. $5.64
Manistee a. 26 b. $5.43
Wexford a. 7 b. $8.10
Missaukee a. 2. b. $13.37
Roscommon No Report
Ogemaw a. 1 b. $13.72
Iosco a. 29 b. $5.11
Mason a. 35 b. $4.63
Lake a. 10 b. $7.30
Osceola a. 21 b. $3.53
Clare a. 11 b. $7.02
Gladwin a. 6 b. $8.47
Bay a. 46 b. $4.04
Huron a. 68 b. $12.73
Oceana a. 40 b. $4.34
Newaygo a. 38 b. $4.44
Mecosta a. 28 b. $5.14
Isabella a. 34 b. $4.65
Midland a. 9 b. $7.39
Tuscola a. 65 b. $3.17
Sanilac a. 71 b. $2.22
Muskegon a. 19 b. $5.67
Montcalm a. 27 b. $5.20
Gratiot a. 60 b. $3.38
Saginaw a. 36 b. $4.59
Kent a. 31 b. $4.32
Genesee a. 51 b. $3.77
Lapeer a. 57 b. $3.46
St Clair a. 67 b. $2.79
Ottawa a. 53 b. $3.67
Ionia a. 52 b. $3.74
Clinton a. 59 b. $3.39
Shiawassee a. 48 b. $3.95
Oakland a. 44 b. $4.12
Macomb a. 72 b. $1.71
Allegan a. 66 b. $2.84
Barry a. 58 b. $3.45
Eaton a. 62 b. $3.29
Ingham a. 50 b. $3.87
Livingston a. 54 b. $3.63
Van Buren a. 64 b. $3.21
Kalamazoo a. 47 b. $4.03
Calhoun a. 18 b. $5.68
Jackson a. 21 b. $5.53
Washtenaw a. 32 b. $4.80
Wayne a. 49 b. $3.92
Berrien a. 41 b. $4.29
Cass a. 55 b. $3.61
St Joseph a. 55 b. $3.61
Branch a. 45 b. $4.09
Hillsdale a. 61 b. $3.33
Lenawee a. 43 b. $4.23
Monroe a. 73 b. $1.66

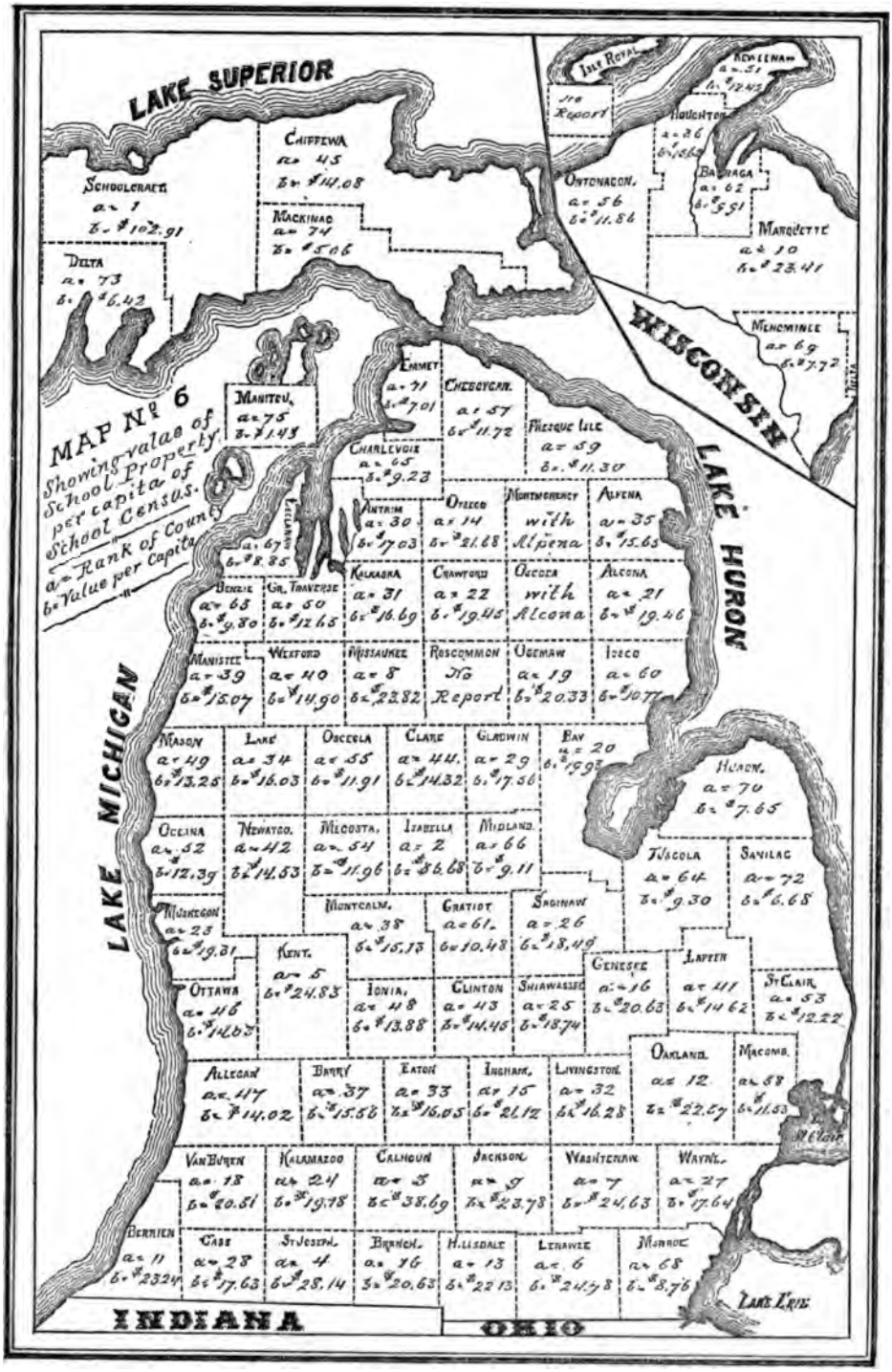

LAKE SUPERIOR
Isle Royale
No Report
Houghton
a = 26
b = $ 9.62
Baraga
a = 62
b = $ 5.51
Ontonagon
a = 56
b = $ 11.86
Marquette
a = 10
b = $ 23.41
Menominee
a = 69
b = $ 7.72
WISCONSIN
LAKE HURON
LAKE MICHIGAN
INDIANA
OHIO
Lake Erie
MAP No 6
Showing value of School Property per capita of School Census U.S.
a = Rank of County
b = Value per capita

TABLE XXIII.

Financial Statistics of State and Incorporated Educational Institutions, Compiled from the Reports of Presiding Officers for the Academic Year 1879–80.

Institution.	Annual Cost of Tuition per Student.	Av. Cost of Board per Week.	Total Av. Annual Cost per Student,—(to the Student)	Total Av. Annual Cost per Student,—(to the State).	Estimated Value of Grounds, Buildings, Apparatus, etc.	Amount of Productive Funds.	Income from Productive Funds.	Amount of Legislative Appropriation for Year 1880.	Receipts from Tuition Fees during Year.	Receipts from all other Sources.	Current Expenses for the Year.	Expenses for Permanent Improvements.	Liabilities.
State:													
University of Michigan	[a] $20 00	$2 50	$200 00	$32 51	$681,442 00	$458,655 96	$38,643 83	$64,250 00	$60,911 33	$2,298 50	$136,130 29	$77,394 19	.....
Agricultural College	.....	2 38	90 00	.....	274,380 16	301,833 86	17,799 15	12,040 12	.....	11,823 11	33,809 74	9,461 91	.....
Normal School	10 00	2 50	120 00	38 38	85,000 00	68,966 04	4,333 52	17,500 00	1,742 50	259 00	24,066 62	.....	.....
Institution for the Deaf and Dumb	.....	.....	.....	162 54	277,525 00	.....	.....	41,925 33	425 00	4,293 98	46,354 34	1,925 33	.....
School for the Blind [b]	.....	.....	.....	.....	.....	.....	.....	10,000 00	.....	.....	.....	.....	.....
Reform School	.....	65	.....	96 00	264,531 15	.....	.....	35,500 00	.....	12,628 46	32,903 38	3,942 30	.....
Public School for Dependent Children	.....	.....	.....	122 23	190,000 00	.....	.....	36,000 00	.....	.....	35,000 00	.....	.....
Incorporated:													
Adrian College	15 00	2 25	.....	.....	133,000 00	83,878 70	3,867 47	.....	1,878 23	3,579 60	14,867 56	358 14	$31,467 24
Albion College	.....	2 50	.....	.....	50,000 00	170,000 00	12,700 00	.....	4,300 00	.....	15,500 00	1,000 00	15,000 00
Battle Creek College	16 80	2 00	.....	.....	52,040 70	.....	.....	.....	5,031 32	7,634 25	8,000 00	1,054 29	5,692 10
Grand Traverse College	15 00	2 50	.....	.....	40,000 00	10,000 00	800 00	.....	150 00	.....	900 00	300 00	1,500 00
Hillsdale College	10 50	1 75	.....	.....	125,000 00	120,000 00	11,000 00	.....	.....	.....	12,000 00	500 00	10,000 00
Hope College	12 00	2 50	.....	.....	45,000 00	69,500 00	4,282 62	.....	1,238 00	3,068 03	8,812 72	.....	25,170 08
Kalamazoo College	18 00	3 00	.....	.....	100,000 00	64,036 20	4,065 73	.....	2,450 00	1,100 00	7,536 45	.....	13,654 00
Olivet College	15 21	2 00	.....	.....	113,000 00	116,036 63	6,925 93	.....	3,224 06	7,335 12	13,587 36	1,035 43	16,867 68
German-American Seminary	[c] 20 00	.....	.....	.....	[c] 25,000 00	[c] 3,000 00	[c] 263 00	.....	[c] 2,796 48	[c] 504 16	[c] 6,085 16	.....	.....
Michigan Female Seminary	[d] 175 00	.....	.....	.....	50,000 00	.....	.....	.....	7,490 34	.....	8,000 00	.....	.....
Michigan Military Academy	[d] 350 00	.....	.....	.....	50,000 00	.....	.....	.....	28,000 00	.....	.....	1,000 00	.....
Raisin Valley Seminary	22 00	2 50	.....	.....	10,000 00	25,000 00	1,800 00	.....	1,500 00	200 00	3,300 00	.....	.....
Spring Arbor Seminary	9 66	2 25	.....	.....	6,000 00	.....	.....	.....	1,014 31	.....	1,100 00	.....	700 00

[a] Not properly tuition but tax for incidental expenses; to students coming from outside the State, this tax is $25.
[b] School organized too late to be included in this report.
[c] From report for 1878–9, these items not being reported the current year.
[d] Including board.

DOCUMENTS

ACCOMPANYING THE

REPORT

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION.

STATE BOARD OF EDUCATION.

ANNUAL REPORT.

To the Legislature of the State of Michigan:

GENTLEMEN,—The provisions of law by which this board was created and under which it acts have never been consolidated into any one act, and are therefore scattered through the legislation of the past thirty years.

The State Board of Education came into existence by virtue of the act establishing a State Normal School. This act was passed by the legislature of 1849, and approved March 28. A supplemental act was approved March 31, 1849, and both were consolidated and somewhat amended in an act approved March 28, 1850.

The constitution of 1850 changed the number of members of the board and the manner of their selection. The board, as provided by law, consisted of three members appointed by the Governor, together with the Lieutenant Governor, State Treasurer, and Superintendent of Public Instruction *ex officio*. The constitution reduced the number, making three members elective, and only the Superintendent of Public Instruction a member *ex officio*. Such has been the constitution of the board ever since,—the Superintendent of Public Instruction being the secretary and the board electing its own president and treasurer.

The duties of the board have been varied and enlarged by legislation at different times since its first organization. By the laws of 1849 and 1850 the board was made simply a board of control of the Normal school. It came into existence for that express purpose, and for no other. In the act of 1849 it is referred to at least once as the Normal School Board. There was no reason until the adoption of the constitution of 1850 why it might not better have been termed the Normal School Board and nothing else. The constitution, however, seemed to contemplate some more general functions for the State Board of Education, but still left these other duties to be defined by the legislature, saying only that "the board shall have the general supervision of the State Normal school, and their duties shall be prescribed by law." The board, however, was made elective with the other State officers at the general biennial election, and the evident intention of the convention was to constitute a board that might serve many purposes other than those which were contemplated in the legislation of the previous year.

No laws were passed in any way changing or enlarging the duties of the board under the constitution until 1855, when, by an act approved February 12th, the Agricultural College was established and the control of that institution was given to this board.

By an act, approved February 13, 1857, the State Board of Education is

"authorized to grant to such students as shall have completed the full course of instruction in the State Normal school, and shall have been recommended by the board of instruction, a diploma," which shall entitle its possessor to all the honors and privileges belonging to such graduates.

By an act, approved February 15, 1859, and amended in 1863, it is made the duty of this board to make a list of books which are unsectarian in character and suitable for district or township libraries, which list they may, from time to time, revise and amend; and to advertise for proposals for furnishing the same, and to contract with the lowest responsible bidders to furnish such books to the districts or townships ordering them, in suitable binding and at stipulated prices. In connection with this, and by the same act, it is made the duty of the Superintendent of Public Instruction to send this list of books, with the prices of the same, to the officers of districts and townships having libraries, from which they may select books for their use.

In their reports for the years 1859 and 1860 the board very strongly urged the establishment of a separate board of control for the care and management of the Agricultural College and its interests. In accordance with this recommendation a law was passed, approved March 15, 1861, by which there was constituted and established a State Board of Agriculture, and the entire control of the Agricultural College was transferred to that board.

The Legislature of 1879 passed an act, approved May 27, by which the board was empowered to hold stated meetings for the examination of teachers, and to grant State certificates to such teachers as they may approve upon such examination. These certificates entitle the holder to teach in any of the schools of this State without further examination, and are valid for the term of ten years unless sooner revoked by the board.

The same act also makes it the duty of the board to prepare questions suitable for the examination of teachers for the various grades of certificates provided by law to be given to teachers of the State, and the Superintendent of Public Instruction is required to furnish these questions to officers authorized by law to examine teachers.

These several provisions of law have from time to time enlarged the duties and responsibilities of the board and make it more nearly what its name implies, a *State Board of Education*. These duties now include the care of the State Normal school; the granting of diplomas to the graduates of the school; the selecting and contracting for books for township and district libraries; the granting of State certificates on examination, and the preparation of questions for the examination of common school teachers throughout the State.

The Normal School.

The law establishing the State Normal School defined its purpose to be the "instruction of persons, both male and female, in the art of teaching and in all the branches that pertain to a good common school education; also to give instruction in the mechanic arts and in the arts of husbandry and agricultural chemistry, in the fundamental laws of the United States, and in what regards the rights and duties of citizens." This definition of the work and scope of the Normal school has never been changed by any direct or amendatory enactment. Several things have, however, tended very materially to change the plan of the school.

It will be seen that the above statement of the work of the Normal school really includes all the work originally planned for the branches of the Univer-

sity. At the time the Normal school was projected, the branches of the University had been permanently discontinued, and the high schools of the State were not definitely planned. The union school law had just been enacted, but it did not then contemplate any such development of first-class secondary schools as has since resulted. There was, in fact, nothing in the way of public school facilities between the district school and the University. The branches had contemplated giving ample facilities for normal and industrial or agricultural training. The Normal school, therefore, as the only State school of the same grade, was to be a teachers' school, a farmers' school, and an academy, all in one. In reality the academy had but little more right to a place in a true normal school than had the farmers' department. But for the time academic instruction had to be furnished there because it was to be had nowhere else. The union school law had not yet developed a half-dozen high schools in the State. The private academies and seminaries were of very fluctuating character. The only safe way to secure academic training for the special work of the school was by supplying the academy within the Normal school itself. This was done by the establishment of an academic department and by extended courses of academic work in the normal department. No considerable attempt was made at the Normal school to meet the demands of an agricultural college, and very soon after its opening in 1852 the subject of a separate farmers' school began to be agitated. In 1855 the law establishing such an institution relieved the Normal school of any further work in that direction.

The academic work of the school, however, remained a necessity for many years. The slow development of the union and high schools made it necessary that the Normal school should be prepared to give any range of academic instruction required by its students. This necessity, however, came to be regarded as only a temporary one as the development of the graded and high school system of the State became more general. The law establishing the Agricultural college had very greatly aided the Normal school in confining its work to its main purpose. The development of the high schools did even more in this direction; and this board soon began to look forward to the time when the school would be relieved of a large share of its preparatory academic work, and thus be enabled to confine itself to legitimate professional instruction of teachers for the public schools. For the past ten years this step has been agitated by the friends of the Normal school.

Believing that the time had come to make some change in accordance with this view of the true field of the Normal school, the board at a meeting held March 8, 1878, appointed a committee consisting of its president and secretary to investigate the propriety and necessity of a change in the courses of study. This committee obtained the views of the various members of the Normal school faculty and others as to needed changes in the work of the institution, and reported at a subsequent meeting of the board, making the following recommendations:

1st. Enlarging the School of observation and practice, so as to constitute a graded school representing all the departments of our best graded schools, so that students applying for admission to the Normal school, deficient in academic preparation, may be able to make such preparation in the School of observation and practice.

2d. This School of observation and practice to be under the supervision of the principal of that school with two skilled assistants; but the teaching to be done by Normal students under the direction and inspection of the respective professors of the Normal school.

3d. To establish in the Normal school proper three courses of study, of on year each,—the Common School, Higher English, and Language,—fittin teachers respectively for the lower and higher grades in our common and grad ed schools.

4th. Aside from general reviews in connection with professional instruction the Normal school proper to be confined to professional instruction.

5th. The requirements for admission to the Normal school proper should b carefully and fully stated in the prescribed courses of study, and students ad mitted on certificates from our high schools should still be required to pass ex amination in the elementary branches.

6th. It is recommended that in the prescribed courses of study, both for th School of observation and practice and for the Normal school proper, mor attention be given to drawing and English history and literature.

The committee did not think there would be any difficulty in combining an modifying the several schemes, or courses of study, so as to remodel them on the plan proposed, prescribing just what should be pursued in the School of observation and practice, and what should be pursued in the Normal schoo proper. They deemed the School of observation and practice an absolutel essential part of the Normal school, without which, and without full and care ful teaching in which by the pupils in the Normal school under their respect ive professors, the Normal school would fail to send out teachers fully fitte for the work of their profession.

The plan, as above outlined, was adopted by the board without dissent, an the courses of study and requirements for admission were modified in accor ance therewith.

The board realized that the change was one quite in advance of anythin previously undertaken, but they believed the conditions in this State were e pecially favorable to the success of such an undertaking. No other state h so highly developed a class of secondary schools doing academic work of a hig grade and ready to give the needed preparation for the professional courses the Normal school. But the great merit of the plan was that it was one upo which the board, the faculty, and the best friends of the Normal scho throughout the State could agree, and which therefore was likely to have a fa trial and to be made the basis of whatever improvements or changes time an experience might suggest.

It was not thought that in a new and untried character of work the boa was likely to attain the perfect and exact adjustment of all demands witho some experience and experiment. Time has already shown some points wher in the scheme may be better adjusted to the wants of the schools. Yet it safe to say that no change so important and so radical in its principles was ev undertaken and carried so far toward a successful issue with less shock an friction. The school has been very materially changed in its whole charact and during the progress of this change it has steadily grown stronger and be ter. The faculty and pupils have adjusted themselves to the new work, an methods, and relations, and a silent revolution has taken place in the Norm school. Whatever adjustments or modifications may become necessary, the will all be in the way of making the "new departure" more complete in i character and more perfect in its workings. In so far as it is founded on fact it will grow stronger with time and experience. If in any respect it is n adjusted to the actual condition and needs of the schools of the State, it wi easily admit of modification.

The Normal school has made an enviable record in very many respect

An excellent quality of work has been done and the results obtained have been of constantly increasing character and value. The completion of the new building has greatly added to the facilities of the school and enabled the different instructors to do their work with much better facilities for illustration and special training. The greatest need of the school at this time is additional facilities for the School of observation and practice. Especially are these needed in the lower grades to enable the school to illustrate more completely the right grading and handling of a properly graded school, and to develop the best methods of primary and kindergarten work.

The resignation of Prof. Joseph Estabrook, who had held the position of principal since 1870, was tendered to the board in May last and was accepted at its next meeting. The Board of Education felt it but just to itself and to Prof. Estabrook to place on record in its proceedings an expression of the high esteem in which it held the retiring principal on account of his great personal worth and the zeal and ability which he had brought to the arduous duties of his position.

The task of securing a new principal was no easy one and the board realized that great care should be exercised in making the selection. The school was to a certain extent in a transition state, and it needed most of all one who would bring to its administration large experience, great executive ability, high scholarship, and honest sympathy with the progressive spirit of the institution. After much careful labor and an extensive correspondence, the board fixed upon Dr. Malcolm MacVicar, principal of the Normal school at Potsdam, N. Y., as most perfectly meeting the needs of the school in every respect, and the position was tendered him in September. After visiting the school and consulting with the Board and faculty, Dr. MacVicar accepted the position and entered upon the dischage of his duties October 8. The board feel that they very justly have reason to congratulate themselves, the State Normal school, and the State at large upon the advent into our educational field of one so well qualified for the special work he has in hand, and for any work that makes for the good of the schools of Michigan.

The school opened September 14, under the acting principalship of Prof. Daniel Putnam, principal of the School of observation and practice. The number in attendance was considerably in excess of that at the corresponding period the previous year, and everything betokens a successful year's work.

The time since the arrival of Dr. MacVicar is yet so short that the board cannot report anything at length regarding the work of the school under his charge. They, however, have already noted with great pleasure the cordiality with which the principal has been welcomed to his place and work by the faculty and students of the school, and regard it as affording a most happy omen of the future success of the school under his administration.

The school year that closed in June did much to bring the school forward in its new line of work. The numbers of students in the various departments during the year were as follows:

Professional Department.

Common school course	26	
Advanced English course	23	
Language courses	22	
		71

School of Observation and Practice.

High school department	227	
Grammar school department	98	
Primary department	79	
		404
		475
Counted twice by transfer		13
Grand total		462

NORMAL SCHOOL DIPLOMAS.

In accordance with the provisions of law, the Board has granted during the school year 1879–80 *fifty-eight* diplomas to students who have completed one or more of the professional courses and have been recommended by the faculty as entitled to graduation. This number is within thirteen of the entire number in the professional department during the year. Thus the school graduated 82 per cent. of those in its professional courses, exactly the same percentage as the previous year. This shows the school to be doing its legitimate work,—sending its pupils into the schools with the least possible delay after giving them the training which they are prepared to receive at its hands.

The following are the names and classification of the graduates:

Common school course	23
Advanced English course	18
Language courses	17
Total	58

Common School Course.

Abbie C. Abbott, Helen E. Bacon, Silas P. Butler, C. Evora Bucknum, Carrie L. Carr, Mary A. Craft, Harlan J. Dudley, Nettie Evans, Mary Gardner, Nellie Gardner, Jason D. Huston, Stella H. Lawrence, Kittie Moynahan, Clara Phillips, A. May Pinch, Mary M. Sutton, Mary Stack, L. May Steers, Myron H. Stanley, Emma Scott, Beatrice Taffey, Sidney Winney, Mary R. Yost.

Advanced English Course.

Charles H. T. Atwood, John W. Billmire, Braddie Bradshaw, Minnie C. Barnard, Carrie Calkins, Lottie Cooley, May W. Castle, Della Fife, Edgar Haven, Ambrose Hughes, Levi Jones, Theresa McQuillin, Anna A. Paton, Viola F. Ray, Samuel F. Stuff, Eliza C. Trump, Johannes W. Visscher, Eva H. Walker.

Language Courses.

George H. Broesamle, English and German; James Barrett, Classical; Samuel M. Crombie, Latin and French; Warren D. Clisbe, Classical; Blanche R.

Cudworth, Modern Languages; Mary Essig, Modern Languages; Charles T. Grawn, Classical; J. Newton Mead, Classical; Lissie Pattison, Modern Languages; Jessie Paton, English and German; Lucinda D. Rutherford, Latin and German; Orlando J. Stillwell, Latin and German; James H. Stevens, Classical and French; Mintie E. Stafford, Latin and Modern Languages; Milton W. Smith, Classical; Jessie Thomas, Modern Languages; Nannie Towner, English and Latin.

Of the whole number twenty-one were young men, and thirty-seven were young women.

Since the Normal school was organized, 843 graduates have been sent out bearing its diploma, and the work that these hundreds have done in the interest of good schools can hardly be computed. But, beside these graduates, several thousand pupils of the Normal school have gone out without any diploma, indeed, but carrying into their schools a good share of the zeal and earnest purpose which the Normal has done so much to inspire into the teachers of the State.

Library Books.

In accordance with the provisions of law, the board at its meeting in January, 1880, passed upon and approved of a list of books for township and district libraries, and entered into a contract with E. B. Smith & Co. of Detroit as the lowest responsible bidders, to supply at the contract prices named such books as may be selected from the list by the township and district officers ordering them. These books had been selected by a committee of the State Teachers' Association with great care. They are of the most suitable editions for libraries, and are to be furnished in good substantial binding, the contractors to pay the charges for packing and delivery to the railway and express companies.

In compliance with the same law, the Superintendent of Public Instruction issued a circular to township boards of school inspectors and school district officers, inclosing the list, with contract prices annexed, and urging greater care and attention to the management of libraries. The board are satisfied that this action has had a good influence in directing attention to the subject and in furnishing school officers with a certain means of improving the condition of their libraries. The list together with the circular letter of the Superintendent of Public Instruction are presented herewith.

STATE OF MICHIGAN,
DEPARTMENT OF PUBLIC INSTRUCTION,
Lansing, Mich., 1880.

To Township Boards of School Inspectors, and School District Officers:

In accordance with the provisions of law (section 169, General School Laws of 1879), I send you, hereto annexed, a list of books for township and district libraries. This list is furnished by the State Board of Education, a contract having been made by said Board with Messrs. E. B. Smith & Co., of Detroit (the lowest responsible bidders), to supply at the contract prices named, such books as may be selected from the list by the township and district officers ordering them. These books have been selected by a committee of the State Teachers' Association with great care, are of the most suitable editions for libraries, and are to be furnished in good, substantial binding, the contractors to pay the charges for packing and delivery to the railway and express companies. The purpose of the law which provides for this list is two-fold: 1, to give to officers in charge of school libraries the benefit of a general contract, under which they may purchase books at reduced rates, and in a

CURRENT EXPENSE ACCOUNT.

1879.		No. of Voucher.	To Whom Paid.	Amount.
Oct.	24.	1.	Pennsylvania Coal Co., 248 5-20 tons egg coal @ $4 07	$1,010 38
"	24.	2.	Homer Briggs, hauling 248 5-20 tons coal to Normal School 30c	74 48
"	24.	3.	James Hurley, Jr., shoveling 248 5-20 tons coal	8 75
"	31.	4.	Pay roll 1 month (shown in salary account)	1,782 50
Nov.	30.	5.	Pay roll 1 month (shown in salary account)	1,852 50
Dec.	18.	6.	James Hurley, Jr., hauling brush	12 50
"	18.	7.	Newton & Oliver, mason work	22 00
"	18.	8.	J. A. Hall, lamp-posts and lanterns	98 50
"	18.	9.	Fuller Atchinson, cutting wood	8 80
"	18.	10.	James Smith, trimming trees	16 00
"	18.	11.	D. Putnam, class registers, express, etc.	30 70
"	18.	12.	D. Putnam, Webster's dictionary	8 55
"	18.	13.	Field, Leiter & Co., matting	185 93
"	18.	14.	Austin George, Webster's dictionary	8 55
"	18.	15.	John R. Ketchum, 2 days' work	4 00
"	18.	16.	Drury & Taylor, lock, keys and wire	2 89
"	18.	17.	Drury & Taylor, hardware	3 81
"	18.	18.	H. P. Glover, carpet for blackboard erasers	4 26
"	18.	19.	Ypsilanti Postoffice, wrappers and envelopes	18 10
"	18.	20.	Parsons Bros., lumber	11 00
"	18.	21.	Stevens & Loomis, hardware, pump, etc.	47 24
"	18.	22.	Frank Smith, stationery, chemicals, etc.	23 53
"	18.	23.	E. Samson, paints, varnish, etc.	7 33
"	18.	24.	Edgar Rexford, telegrams, express charges	11 27
"	18.	25.	Andrew Harvey & Son, gas-pipe, etc	83 55
"	18.	26.	A. H. Andrews & Co., crayon	60
"	18.	27.	Eberbach & Son, chemical scales and weights	15 00
"	18.	28.	T. S. & J. D. Negus, chronometer	300 00
"	18.	29.	D. Putnam, sciopticon, etc.	40 00
"	18.	30.	E. Samson, 2 Fitz globes	48 00
"	18.	31.	A. H. Andrews, Tellurian globe	54 00
"	18.	32.	E. B. Benjamin, apparatus	168 50
"	18.	33.	Detroit Electrical Works, apparatus	9 23
"	18.	34.	James Jenks, foot lathe and drills	62 55
"	18.	35.	Steinway & Sons, grand piano	675 00
"	18.	36.	American Express Co., express charges	2 70
"	18.	37.	Homer Briggs, freight and cartage	1 51
"	18.	38.	Homer Briggs, moving piano	2 00
"	18.	39.	Homer Briggs, freight and cartage	14 08
"	18.	40.	Homer Briggs, freight and cartage	5 70
"	18.	41.	Homer Briggs, freight and cartage	2 34
"	18.	42.	C. A. Gower	131 57
"	18.	43.	Edgar Rexford	153 45
"	18.	44.	Daniel Kierstead, window shades	32 76
"	18.	45.	George F. Edwards	48 50
"	31.	46.	Pay roll 1 month (shown in salary account)	1,852 50
"	18.	47.	F. H. Pease, expenses to New York	63 25
1880.				
Jan'y	12.	48.	Eberbach & Son, chemicals	16 82
"	12.	49.	M. T. Woodruff, papers and periodicals	44 25
"	31.	50.	Pay roll 1 month (shown in salary account)	1,857 50
Feb.	29.	51.	Pay roll 1 month (shown in salary account)	1,857 50
Mar.	18.	52.	E. Samson, paints and oils	10 96
"	18.	53.	Austin George, 1 case	3 00
"	18.	54.	Homer Briggs, freight and cartage	58
"	18.	55.	Frank W. Marvin, covering steam pipes	150 25
"	18.	56.	Abbot & Ketchum, carpet	207 60
"	18.	57.	D. Putnam, care of small building	18 00
"	18.	58.	H. D. Edwards & Co., fire hose	141 00
"	18.	59.	E. Samson, drawing models, etc.	41 21
"	18.	60.	J. P. Vroman, maps, charts, etc.	36 80
"	18.	61.	M. C. Burch, member visiting committee	16 05

direct tax for the support of their respective libraries (section 35). In any township that has not divided the township library into district libraries, no part of the library moneys that are apportioned from the county treasury can be paid to the districts, but such money remains in the treasury subject to the proper warrant of the board of school inspectors (sections 107 and 75). In townships that have adopted the district library system this money is apportioned to the districts, and is subject to the proper warrants of the district officers (section 168). But in no case is it legal that these library moneys be used for any other purpose than the support of libraries, and officers that appropriate them to any other purpose make themselves liable to severe penalties (Act No. 131, Laws of 1875).

In the case of The People vs. The Treasurer of Wayne County (8 Mich., 392), the Supreme Court decided that *the entire amount of fines, etc., collected* "belongs to the library fund, and no portion can be applied elsewhere." Under this decision, all such moneys illegally withheld or misappropriated, even in past years, may be sued for and recovered. It should be remembered that the officers into whose hands these moneys may have been paid are still answerable for the same, notwithstanding any votes either of the electors or of official boards directing that they be used for other purposes, and hereafter some energetic board, officer, or individual may arise and demand that all these moneys be refunded. While the law stands as it is, it should be obeyed. Text books for pupils, and apparatus,—including maps, charts, globes, dictionaries for use in the schools, etc., cannot legally be purchased with library moneys.

Very Respectfully,

C. A. GOWER,

Superintendent of Public Instruction.

List of Books.

BOOKS.	No. Vols.	Catalogue Price.	Contract Price.	BOOKS.	No. Vols.	Catalogue Price.	Contract Price.
Abbott's Founders of Empires	6	$6 00	*$3 72	Bigelow's Life of Franklin	3	$4 50	$3 00
Abbott's Early British Kings and Queens	5	5 00	*3 10	Plutarch's Lives (Langhorne)	3	4 50	2 75
Abbott's Queens and Heroines	5	5 00	*3 10	Lockhart's Life of Scott (Centenary Edition)	2	2 50	1 75
Abbott's Rulers of Later Times	6	6 00	*3 72	Wirt's Life of Patrick Henry	1	1 50	1 00
The Crusades, (Epoch series)	1	1 00	67	Irving's Life of Washington (School Edition)	1	2 25	1 50
Houses of Lancaster and York, (Epoch series)	1	1 00	67	Smiles's Lives of the Stephensons	1	3 00	2 00
The Age of Elizabeth (Epoch series)	1	1 00	67	Smiles's Life of a Scotch Naturalist	1	1 50	1 00
The Age of Anne (Epoch series)	1	1 00	67	Irving's Life of Columbus (Popular Edition)	1	1 75	1 17
The French Revolution (Epoch series	1	1 00	67	Yonge's Book of Worthies	1	1 25	88
Students' History of Greece	1	1 46	1 15	Coffin's Boys of '76	1	3 00	2 00
Students' Merivale's Rome	1	1 46	1 15	Bayard Taylor's Travels	11	16 50	†11 00
Students' History of France	1	1 46	1 15	Vincent's Land of the White Elephant	1	3 50	2 34
Students' History of Germany	1	1 75	1 60	Vincent's Through and Through the Tropics	1	1 50	1 00
Dickens's Child's History of England	1	1 25	75	Curtis's Howadji in Syria	1	1 50	1 00
Higginson's Young Folks' U. S.	1	1 50	1 10	Curtis's Nile Notes of a Howadji	1	1 50	1 00
Campbell's History of Michigan	1	3 50	2 50	Nordhoff's California	1	2 50	1 67
Parkman's Conspiracy of Pontiac	2	5 00	3 50	Nordhoff's California, Oregon, and Sandwich Islands	1	2 50	1 67
Parkman's Jesuits in North America	1	2 50	1 75	Livingstone's Travels and Last Journals	1	4 50	3 00
Parkman's La Salle and the Great West	1	2 50	1 75	Livingstone's Travels and Last Journals	1	5 00	3 34
Freeman's Old English History	1	2 00	1 50	Livingstone's Travels and Last Journals	1	2 50	1 67
Green's Shorter History of the English People	1	1 75	1 20	Stanley's How I Found Livingstone	1	3 50	2 34
The Boys' Froissart (Lanier)	1	3 00	2 00	Stanley's Through the Dark Continent	2	10 00	6 67
Yonge's History of Greece	1	2 00	1 10	Field's Journey Round the World	2	4 00	‡2 67
Yonge's History of Rome	1	2 00	1 10				
Yonge's History of France	1	2 00	1 10				
Yonge's History of Germany	1	2 00	1 10				
Yonge's History of England	1	2 00	1 10				
Sparks's American Biography	10	12 50	8 34				

* Or 62 cents per volume. † Or $1.00 per volume. ‡ Or $1.34 per volume.

LIST OF BOOKS—*Continued.*

BOOKS.	No. Vols.	Catalogue Price.	Contract Price.
Warner's In the Levant	1	$2 00	$1 40
Warner's My Winter on the Nile	1	2 50	1 67
Mrs. Brassey's Around the World in the Yacht Sunbeam	1	2 00	1 40
Benjamin's Atlantic Islands	1	3 00	2 00
Kingsley's Christmas in the West Indies	1	2 00	1 30
Wallace's Russia	1	4 00	2 80
Parkman's Oregon Trail	1	2 50	1 75
What Mr. Darwin Saw, etc.	1	3 00	2 00
Richardson's The Yellowstone	1	1 50	1 00
Griffis's The Mikado's Empire	1	4 00	2 67
Doolittle's Social Life of the Chinese	2	3 50	2 34
Scott's Ivanhoe	1	1 00	60
Scott's Old Mortality	1	1 00	60
Scott's Antiquary	1	1 00	60
Dickens's David Copperfield, (Crowell's Edition)	1	1 50	90
(Osgood's Edition)	1	75	62
Dickens's Nicholas Nickleby, (Crowell's Edition)	1	1 50	90
(Osgood's Edition)	1	75	62
Dickens's Tale of Two Cities, (Crowell's Edition)	1	1 50	90
(Osgood's Edition)	1	75	62
Dickens's Bleak House, (Crowell's Edition)	1	1 50	90
(Osgood's Edition)	1	75	62
Dickens's Christmas Books, (Crowell's Edition)	1	1 50	90
(Osgood's Edition)	1	75	62
Geo. Eliot's Mill on the Floss	1	1 25	84
Geo. Eliot's Silas Marner, and Clerical Life	1	1 25	84
Vicar of Wakefield (Riverside Classics)	1	1 25	88
Uncle Tom's Cabin (New Edition)	1	2 00	1 40
Robinson Crusoe	1	1 25	88
Rasselas (Bayard Series)	1	1 25	84
Black's Princess of Thule	1	1 75	1 22
Jean Ingelow's Off the Skelligs	1	1 50	1 00
Mrs. Whitney's We Girls	1	1 50	1 00
Mrs. Whitney's Other Girls	1	2 00	1 40
Mrs. Whitney's Real Folks	1	1 50	1 00
Mrs. Whitney's Leslie Goldthwaite	1	1 50	1 00
Mrs. Whitney's Sights and Insights	2	3 00	2 00
Miss Alcott's Little Women	2	3 00	2 00
Miss Alcott's Little Men	1	1 50	1 00
Miss Alcott's An Old Fashioned Girl	1	1 50	1 00
Thackeray's Newcomes	2	2 50	1 67
Thackeray's Pendennis	2	2 50	1 67
Longfellow's Poetical Works (Household Edition)	1	$2 00	$1 40
Whittier's Poetical Works, (Household Edition)	1	2 00	1 40
Bryant's Poetical Works (Household Edition)	1	2 00	1 40
Tennyson's Poetical Works (Household Edition)	1	2 00	1 40
Goldsmith's Select Poems (Rolfe or Hudson)	1	70	55
Wordsworth's Select Poems (Arnold)	1	1 25	88
Milton's Poetical Work's (Masson)	2	3 60	2 52
Whittier's Child Life	1	3 60	2 40
Shakespeare's Select Plays (Rolfe)	12	3 40	*3 00
Palgrave's Golden Treasury	1	1 25	88
Rollo's Tour in Europe	10	10 00	6 50
Tom Brown at Rugby	1	1 25	70
Smiles's Character	1	1 00	67
Smiles's Thrift	1	1 00	67
Smiles's Self-Help	1	1 00	67
Lamb's Tales from Shakespeare	1	1 25	84
Bunyan's Pilgrim's Progress	1	1 25	75
Yonge's Book of Golden Deeds	1	1 25	88
Irving's Sketch Book	1	75	50
Nordhoff's Politics for Young Americans	1	88	65
Æsop's Fables	1	1 50	75
The Fairy Book	1	1 25	88
Alice's Adventures in Wonderland	1	1 50	1 00
Sanford and Merton (Day)	1	1 00	70
Arabian Nights	1	1 00	70
Childhood (Little Classics)	1	1 00	70
Church's Stories from Homer	1	2 00	1 40
Church's Stories from Virgil	1	2 00	1 40
Church's Stories from the Greek Tragedians	1	2 00	1 40
Mrs. Diaz's William Henry Letters	1	1 50	1 00
Mrs. Diaz's William Henry and his Friends	1	1 50	1 00
Hawthorne's Wonderbook	1	1 25	88
Hawthorne's Tanglewood Tales	1	1 25	88
Hawthorne's True Stories	1	1 25	88
Abbott's Science for the Young	4	6 00	4 00
Faraday's Chemical History of a Candle	1	1 00	67
Faraday's Physical Forces	1	1 00	67
Hans Christian Andersen's Stories and Tales	1	1 50	1 00
Hans Christian Andersen's Wonder Stories	1	1 50	1 00

* Or 55 cents per volume.

STATE CERTIFICATES.

The duty imposed upon the board by the law of 1879, providing for examination for State certificates, has been performed in accordance with what seemed the intent of the law. The board has held two examinations during the year upon due announcements, and has issued certificates as follows:

First Grade.

Mr. Varnum B. Cochran, Miss Julia A. King, Mrs. L. F. Selfridge, Mr. E. P. Church, Mr. C. B. Thomas.

Second Grade.

James Warnock, James A. Smith, W. W. French.

Under a previous law empowering the Superintendent of Public Instruction to grant State certificates without examination there were issued about 140 certificates which, being for life, are still in force. A list of persons holding such certificates was published in the reports of the Superintendent of Public Instruction for the year 1873.

Examination Questions.

In compliance with the requirements of law, the board has prepa red and forwarded to the township superintendents throughout the State lists of questions for the examination of teachers. These were sent out in March and September, and have proved of great service to examining officers; while the law does not confine examining authorities to the use of these questions alone, or even require that they shall be used at all, still the township superintendents are employing them very generally, and heartily approve the plan since it saves much trouble and tends to establish a uniformity in the work throughout the State. Even those superintendents who do not use the prepared questions are no doubt influenced to raise the standard of their examinations by having these lists as a guide.

The board has endeavored to meet the requirements of the various laws prescribing its duties in every respect, and to make its work of a character befitting its name and relation to the schools of the State. In this it has been cordially aided by the principal and faculty of the Normal school, and by all with whom they have had any official relations.

Respectfully submitted.

W. J. BAXTER,
G. F. EDWARDS,
EDGAR REXFORD,
C. A. GOWER,
State Board of Education.

FINANCIAL STATEMENT.

Salary Account.

State Board of Education in account with Edgar Rexford, Treasurer.

Prof. J. Estabrook	$2,025 00	
" D. Putnam	2,025 00	
" C. F. R. Bellows	1,800 00	
" Lewis McLouth	1,800 00	
" F. H. Pease	1,800 00	
" A. Lodeman	1,800 00	
" J. P. Vroman	1,800 00	
" A. George	1,800 00	
Miss Ruth Hoppin	900 00	
" Helen M. Post	700 00	
" E. J. Coates	700 00	
" Fanny E. Goffe	630 00	
John R. Ketchum	50 80	
C. C. Vroman	534 20	
		$18,365 00

The Professional Schools

are making steady and most satisfactory progress. The law school needs most imperatively for its use the whole of the law building, a good share of which is now occupied by the general library. The strict examination for admission to the medical schools and the extension of the term from six to nine months, instead of diminishing the schools one-third, as was expected, has to the surprise of all only increased their numbers.

The chemical laboratory during the past year has had one hundred and ninety-six tables at which students were taught and trained in all the many branches of chemistry by actual, personal manipulation. The tables were used by all medical, dental, and pharmaceutical students as well as by many under-graduates. These tables were so utterly inadequate to the necessities of the department that the Regents were forced to enlarge the laboratory by adding a new story to the present building, at the close of the present year.

The numbers of the dental school have so multiplied that their enlarged quarters are too strait for them.

The Hospitals

now added to the several medical departments seem to us to have demonstrated most clearly the wisdom of the legislature in their establishment. The amount of suffering relieved, the numbers restored to sight and health and consequent usefulness to the State, would, we are sure, alone more than compensate for all the outlay upon these State hospitals, apart from the immense value to the medical departments of the clinical instruction which they afford.

Miscellaneous.

The Regents have granted temporary leave of absence to the President of the University to assume for a time the position of Minister to China, to accomplish a special work in behalf of the Nation at large. Prof. H. S. Frieze was made acting president in his absence, a position he has before filled with credit to himself and to the great satisfaction of the Board.

The opening year of 1880–1 will show a large increase of students over the year that has closed.

In addition to the above statement of the condition of the University, we annex, in accordance with law, the following schedules:

Schedule A shows the receipts and expenditures for the past year and an estimate of expenses for the ensuing year;

Schedule B shows the number of professors, tutors, and other officers, and the compensation of each;

Schedule C shows the number of students in the several departments and in the different classes.

All of which is respectfully submitted.

E. C. WALKER,
ANDREW CLIMIE,
BYRON M. CUTCHEON,
SAMUEL S. WALKER,
GEORGE DUFFIELD,
J. J. VAN RIPER,
JAS. SHEARER,
E. O. GROSVENOR,
Regents.

A.

ANNUAL REPORT OF THE FINANCE COMMITTEE.

The Finance Committee of the Board of Regents submit a report for fifteen months to bring the financial year of the University to agree with the financial year of the State, from July 1, 1879, to September 30, 1880. Also an estimate of the probable receipts and disbursements for the year ending September 30, 1881:

RECEIPTS.

Balance on hand July 1, 1879	$28,710 49
Received from State Treasurer—	
Interest on University fund	51,451 78
State aid, 1–20 mill tax	47,250 00
Steam heating apparatus	20,000 00
Museum building	40,000 00
Homœopathic hospital	6,500 00
Homœopathic medical college	8,000 00
Dental college	7,000 00
Hospital	3,000 00
General library	2,000 00
Homœopathic hospital equipment	1,250 00
Matron's house	1,000 00
School of mines equipment	500 00
First national bank, interest on Treasurer's account	1,608 95
Insurance on University hall	904 34
Duty refunded on obstetrics manikin	31 10
Transfer from school of mines equipment	249 07
Students' fees, Laboratory deposits, etc	76,707 93
Total receipts	$296,163 66

DISBURSEMENTS.

Paid warrants for salaries of officers, professors and employés	$124,777 92
Paid on vouchers—	
Contingent expenses	72,468 70
Museum building (special)	39,022 88
Steam heating apparatus (special)	19,898 01
Homœopathic hospital (special)	6,500 00
General library (special)	3,850 80
Homœopathic medical college (special)	3,244 22
Hospital (special)	2,849 14
Dental college (special)	2,087 23
Matron's house (special)	1,000 00
Homœopathic hospital equipment (special)	753 81
School of mines equipment (special)	250 93
Dental college apparatus (special)	121 26
School of mines	20 00

Physiological laboratory (special)	$2 45
Transferred from school of mines equipment (special)	249 07
Total disbursements	$277,096 42
Balance in treasury, October 1, 1880	19,067 24
	$296,163 66

A statement of the receipts and disbursements for the general expense account and several special funds is also appended and classified.

GENERAL FUND.

Balance on hand July 1, 1879	$12,565 44
Received from State Treasurer—	
Interest on University fund	51,451 78
State aid, 1-20 mill tax	47,250 00
Students' fees, laboratory deposits, etc	76,707 93
First national bank account—Interest on account	1,608 95
Insurance paid on University hall	904 34
Duty refunded on obstetrics manikin	31 10
Transfer from school of mines equipment	249 07
Total receipts	$190,768 61

DISBURSEMENTS.

Paid warrants, salaries of officers	$105,037 17
Paid vouchers for contingent expenses	72,468 70
Total disbursements	$177,505 87
Balance on hand, October 1, 1880	13,262 74

The expenditures on vouchers for contingent expenses are classified as follows:

Alterations and repairs	$9,325 47
Fuel and lights	6,846 66
Grounds	619 20
Postage	904 56
Insurance	2,248 25
Engineering department	561 21
General library	133 07
Law library	604 17
Medical library	512 36
Advertising medical department	375 90
Advertising school of pharmacy	214 26
Museum and microscopical laboratory	1,190 85
Chemical laboratory	9,024 20
Department of general chemistry	530 86
Department of physics	449 68
Physiological laboratory	566 68
Astronomical observatory	1,065 83

Printing Regents' proceedings, Calendar, and Commencement address	$1,548 58
Students' fees refunded	1,629 00
Triennial catalogue	93 00
Portrait J. D. Pierce, by A. Bradish	100 00
Obstetrics, manikin, Geo. Tiemann & Co.	155 00
Special claim, J. C. Watson	534 45
Attorneys and accountants	458 75
Steam heating apparatus	4,702 90
Hospital amphitheatre	3,473 43
Museum cases, construction	5,065 53
Carpenter shop and machinery	3,124 94
Laboratory enlargement	9,170 89
Contingent fund	7,299 02
	$72,468 70

SPECIAL FUNDS.

Homœopathic medical college—	
Balance in treasury, July 1, 1879	3,014 71
Received from State Treasurer	8,000 00
Total receipts	$11,014 71

DISBURSEMENTS.

Paid warrants for salaries	6,450 00
Paid vouchers for expenses	3,244 22
Total disbursements	$9,694 22
Balance in treasury, October 1, 1880	1,320 49

DENTAL COLLEGE.

Received from State Treasurer	$7,000 00
Total receipts	$7,000 00

DISBURSEMENTS.

Paid warrants for salaries	$4,075 00
Paid vouchers for expenses	2,087 23
Total disbursements	$6,162 23
Balance in treasury, October 1, 1880	837 77

DENTAL COLLEGE SALARIES.

Balance in treasury, July 1, 1879	$600 00
Paid warrants for salaries	600 00

DENTAL COLLEGE APPARATUS.

Balance in treasury, July 1, 1879	$121 26
Paid vouchers for apparatus	121 26

School of Mines.

Balance in treasury, July 1, 1879	$1,635 75	
Paid warrants for salaries		$1,615
Paid voucher for expenses		20
		$1,635

School of Mines Equipment.

Received from State Treasurer	$500 00	
Paid vouchers for expenses		$250
Transferred to general fund		249
		$500

General Library.

Balance in treasury, July 1, 1879	$1,850
Received from State Treasurer	2,000
Total receipts	$3,850
Paid vouchers for expenses	$3,850

Hospital.

Balance in treasury, July 1, 1879	$1,920
Received from State Treasurer	3,000
Total receipts	$4,920
Paid vouchers for expenses	2,849
Balance in treasury, October 1, 1880	$2,070

Museum Building.

Received from State Treasurer	$40,000
Paid vouchers on same	39,022
Balance in treasury, October 1, 1880	$977

Steam Heating Apparatus.

Received from State Treasurer	$20,000
Paid vouchers on same	19,898
Balance in treasury, October 1, 1880	$101

Homœopathic Hospital.

Received from State Treasurer	$6,500
Paid vouchers on same	6,500

Homœopathic Hospital Equipment.

Received from State Treasurer	$1,250 00
Paid vouchers on same	753 81
Balance in treasury, October 1, 1880	496 19

Matron's House.

Received from State Treasurer	$1,000 00
Paid vouchers on same	1,000 00

Salary of Professor of Physics.

Balance in treasury, July 1, 1879	$1,400 00
Paid warrants for salary	1,400 00

Salary of Professor of Geology.

Balance in treasury, July 1, 1879	$1,000 00
Paid warrants for salary	1,000 00

Extended Term, Department of Medicine and Surgery.

Balance in treasury, July 1, 1879	$2,250 00
Paid warrants for salaries	2,250 00

Extended Term, Homœopathic Medical College.

Balance in treasury, July 1, 1879	$1,975 00
Paid warrants for salaries	1,975 00

Physiological Laboratory.

Balance in treasury, July 1, 1879	$377 45	
Paid warrants for salary		$375 00
Paid vouchers for expenses		2 45
		$377 45

Recapitulation.

Balance in treasury, Oct. 1, 1880, in general fund	$3,262 74
Balance in treasury, Oct. 1, 1880, homœopathic medical college	1,320 49
Balance in treasury, Oct. 1, 1880, in dental college	837 77
Balance in treasury, Oct. 1. 1880, in hospital	2,070 94
Balance in treasury, Oct. 1, 1880, in steam heating	101 99
Balance in treasury, Oct. 1, 1880, in museum building	977 12
Balance in treasury, Oct. 1, 1880, in homœopathic hos. equip	496 19
Total balance in treasury	$19,067 24

The estimated receipts for the fiscal year ending September 30, 1881, are as follows:

Balance on hand, October 1, 1880	$19,067
For interest on University fund	38,500
For State aid, 1–20 mill tax	31,500
For homœopathic medical college, Act of 1875	6,000
For homœopathic medical college, Act of 1879	2,000
For students' fees, laboratory deposits, etc.	65,000
For interest on Treasurer's account	500
Estimated amount of receipts	$162,567

The estimated expenditures for the fiscal year ending September 30, 188 are as follows:

For salaries of officers and professors	$111,000
For alteration and repairs	5,000
For fuel and lights	7,000
For grounds	500
For insurance	2,500
For general library	2,000
For medical library	500
For law library	500
For annual calendar	1,200
For printing Regents' proceedings	500
For postage	800
For engineering department	500
For physical laboratory	750
For physiological laboratory	250
For department of general chemistry	600
For current expenses, dental college	1,500
For current expenses, homœopathic medical college	1,500
For chemical laboratory supplies	8,000
For purchase of triennial catalogue	807
For advertising department of medicine and surgery	200
For advertising department of law	200
For advertising department of literature, science, and the arts	200
For advertising homœopathic medical college	200
For advertising dental college	200
For advertising school of pharmacy	200
For hospital and clinics	3,000
For homœopathic hospital and clinics	1,500
For homœopathic hospital equipment	496
For museum building	977
For museum and microscopical laboratory	1,000
For Regents' expenses	1,000
For contingent expenses	6,000
Estimated amount of disbursements	$160,580

The annual report of the Treasurer, with a full list of all warrants paid, herewith submitted. (This list of warrants has been compared with the boo of the Secretary of the Board of Regents and found correct.)*

*The annual report of the Treasurer was not furnished for publication in this Report.—SUI OF PUBLIC INSTRUCTION.

Your committee submit herewith a list of all the officers, professors, and employés of the University, with the amount of salary paid to each.*

The receipts for students' fees and laboratory deposits have been compared with the tickets issued by the Secretary of the Board of Regents and found correct.

The vouchers for contingent expenses have also been carefully examined and agree with the report of the Treasurer.

Your committee record with pleasure the increased number of students and the consequent increase in the fees received into the treasury. This increase is included in the balance on the 1st of October of this year, and indicates the cause why the estimates for the next year show this balance decreased and nearly exhausted. The building of the laboratory enlargement at a cost of fifteen thousand dollars for enlarging the building, putting in the additional tables, and furnishing the same; and the building of the new museum cases, at a cost of six thousand five hundred dollars, give adequate reasons for such showing. And the committee feel authorized in view of these facts to ask the Board of Regents to submit to the legislature a full statement of the reasons for the above expenditures and their urgent necessity. At this date the enlarged laboratory with its addition of ninety-six tables, is the largest laboratory in the United States, having two hundred and seventy-eight tables, which are fully occupied throughout the college year.

ANDREW CLIMIE,
Chairman Finance Committee.

B.

MEMBERS OF THE FACULTIES, AND OTHER OFFICERS.

	Annual Salary.
James B. Angell, LL. D.,† President	
Rev. George P. Williams, LL. D., Emeritus Prof. of Physics	$500 00
Alonzo B. Palmer, M. A., M. D., Professor of Pathology and the Practice of Medicine	2,200 00
Corydon L. Ford, M. A., M. D., Professor of Anatomy and Physiology	2,200 00
Henry S. Frieze, LL. D., Professor of the Latin Language and Literature, and Acting President	3,500 00
Hon. James V. Campbell, LL. D., Marshall Professor of Law	1,500 00
Hon. Thomas M. Cooley, LL. D., Jay Professor of Law, and Dean of Faculty	1,800 00
Edward Olney, LL. D., Professor of Mathematics	2,200 00
Charles K. Adams, LL. D., Professor of History	2,200 00
Charles A. Kent, M. A., Fletcher Professor of Law	1,500 00
Rev. Benj. F. Cocker, D. D., LL. D., Professor of Moral and Mental Philosophy	2,200 00
Albert B. Prescott, M. D., Professor of Organic and Applied	

*See Schedule B.
†Absent on Leave.

	Annual Sala
Chemistry and Pharmacy	$ 2,200
Rev. Martin L. D'Ooge, Ph. D., Professor of the Greek Language and Literature	2,200
Charles E. Greene, M. A., C. E., Professor of Civil Engineering	2,200
George E. Frothingham, M. D., Professor of Materia Medica and Ophthalmic and Aural Surgery	2,200
Donald MacLean, M. A., M. D., Professor of Surgery	2,200
Edward S. Dunster, M. A., M. D., Professor of Obstetrics and Diseases of Women and Children	2,200
Moses Coit Tyler, LL. D., Professor of the English Language and Literature	2,200
*William H. Pettee, M. A., Professor of Mineralogy and Economic Geology	2,200
Samuel A. Jones, M. D., Professor of Materia Medica, Therapeutics, and Experimental Pathogenesy, in the Homœopathic Medical College	2,200
Jonathan Taft, D. D. S., Professor of the Principles and Practice of Operative Dentistry, and Dean	1,700
John A. Watling, D. D. S., Professor of Clinical and Mechanical Dentistry	1,600
John W. Langley, S. B., M. D., Professor of General Chemistry	2,200
William P. Wells, M. A.,* Kent Professor of Law	
Charles I. Walker, LL. D. (Filling the Chair of Kent Professor of Law in the absence of Prof. Wells)	1,500
Edward C. Franklin, M. D., Professor of Surgery in the Homœopathic Medical College	2,200
Charles Gatchell, M. D., Professor of Theory and Practice of Medicine in the Homœopathic Medical College	2,200
Mark W. Harrington, M. A., Professor of Astronomy and Director of the Observatory	2,200
Joseph B. Steere, Ph. D., Professor of Zoölogy and Curator of the Museum	2,200
Edward L. Walter, Ph. D., Professor of Modern Languages and Literature	2,200
Alexander Winchell, LL. D., Professor of Historic Geology and Palæontology	2,200
William H. Payne, M. A., Professor of the Science and the Art of Teaching	2,200
Hon. Alpheus Felch, LL. D., Tappan Professor of Law	1,500
Charles K. Wead, M. A., Acting Professor of Physics	1,600
Albert H. Pattengill, M. A., Assistant Professor of Greek	1,600
Joseph B. Davis, C. E., Assistant Professor of Civil Engineering	1,600
Wooster W. Beman, M. A., Assistant Professor of Mathematics	1,600
Isaac N. Demmon, M. A., Assistant Professor of Rhetoric and Anglo-Saxon	1,600
Charles N. Jones, B. A., Assistant Professor of Mathematics	1,600
Preston B. Rose, M. D., Assistant Professor of Physiological Chemistry and Toxicology, and Lecturer on Renal Diseases	1,600

*Absent on leave.

	Annual Salary.
Elisha Jones, M. A., Assistant Professor of Latin	$1,600 00
Rev. Richard Hudson, M. A., Assistant Professor of History	1,600 00
Volney M. Spalding, M. A., Assistant Professor of Botany	1,600 00
Raymond C. Davis, Librarian	1,500 00
William J. Herdman, M. D., Lecturer on Pathological Anatomy and Demonstrator of Anatomy	1,600 00
Victor C. Vaughan, Ph. D., M. D., Lecturer on Medical Chemistry and Assistant in the Chemical Laboratory	1,200 00
Charles H. Stowell, M. D., Lecturer on Physiology and Histology	1,200 00
P. R. B. de Pont, B. A., B. S., Instructor in French, and Secretary of the Faculty	1,300 00
Charles S. Denison, M. S., C. E., Instructor in Engineering and Drawing and Assistant in Architecture	900 00
Alfred Hennequin, M. A., Instructor in French and German	900 00
Calvin Thomas, M. A., Instructor in Modern Languages	900 00
Otis C. Johnson, M. A., Assistant in Chemical Laboratory (Qualitative Analysis)	900 00
Louisa Reed Stowell, M. S., Assistant in Microscopical Botany	750 00
Byron W. Cheever, M. A., M. D., Assistant in Chemical Laboratory (Quantitative Analysis and Assaying)	50 00
William H. Dorrance, D. D. S., Assistant in Mechanical Dentistry	800 00
Elizabeth M. Farrand, Assistant Librarian	500 00
Dennie J. Higley, M. A., Assistant in Museum	150 00
Alexander C. MacLean, M. D., Hospital Surgeon	800 00
Douglas A. Joy, M. E., M. D., Assistant in General Chemistry	750 00
John M. Schaeberle, C. E., Assistant in Observatory	500 00
E. Fred. Wood, M. E., Dispensing Clerk in the Chemical Laboratory	600 00
Ferdinand Thum, Assistant in Chemical Laboratory	
John L. Irwin, Assistant in Chemical Laboratory	

ASSISTANTS IN THE DEPARTMENT OF MEDICINE AND SURGERY.

George Byron Ayres, M. D., Assistant to the Professor of Anatomy and Assistant Demonstrator of Anatomy, and Secretary of the Faculty	200 00
George A. Hendricks, M. D., Assistant Demonstrator of Anatomy.	200 00

ASSISTANT IN THE HOMŒOPATHIC MEDICAL COLLEGE.

Aaron R. Wheeler, M. D., Assistant to the Professor of Surgery	100 00

ASSISTANTS IN THE DENTAL COLLEGE.

Uriah D. Billmeyer	125 00
Alfred W. Hoyt	125 00
Guy H. Morgan	

C.

SUMMARY OF STUDENTS.

Department of Literature, Science and The Arts.

Resident graduates	13	
Candidates for degrees	387	
Students not candidates for degrees	48	
		448

Department of Medicine and Surgery.

Students—(total in the department)	353

Department of Law.

Seniors	180	
Juniors	215	
		395

School of Pharmacy.

Resident graduate	1	
Second year	33	
First year	47	
		81

Homœopathic Medical College.

Students—(total in the college)	70

College of Dental Surgery.

Students—(total in the college)	83
Total in the University	1,430

D.

PRESIDENT'S ANNUAL REPORT.

To the Honorable Board of Regents:

In the absence of the President, who by your consent has accepted from the National government, for a limited period, the office of Minister to China, it becomes my duty as Acting President, to report the state of the University for the year ending June 30, 1880. It would doubtless have been extremely gratifying to the President to present to you in person the report for the year which has been by far the most prosperous in the history of the institution; the ninth year, too, of his own wise and able administration, marked by the steady advancement of the University in the great work for which it was organized, and giving abundant promise of still greater progress in the future. The year has been distinguished by largely increased attendance, by a decided improvement in all departments of the University in the standard of scholarship, and by uninterrupted order and harmony in all its internal working.

The Faculties, now embracing fifty-two officers of instruction, have remained nearly unchanged. Dr. Henry F. Lyster, appointed Lecturer on the Theory and Practice of Medicine during the absence of Professor Palmer, resigned prior to the opening of the first semester, and Professor Palmer, to whom leave of absence had been granted for a year, was recalled from Europe. Professor George S. Morris accepted a temporary appointment to fill the chair of Modern Languages during the absence of Professor Walter, who was permitted by the Board to spend the first semester in Paris. Hon. Alpheus Felch, ex-Governor of the State of Michigan, was appointed to the newly established Tappan Professorship of Law.

Four hundred and ten degrees on examination, and four honorary degrees have been conferred, as follows:

DEGREES ON EXAMINATION.

Pharmaceutical Chemist	24
Mining Engineer	3
Civil Engineer	4
Bachelor of Letters	3
Bachelor of Science	2
Bachelor of Philosophy	16
Bachelor of Arts	29
Master of Philosophy	2
Master of Arts	7
Doctor of Philosophy	1
Doctor of Medicine (Department of Medicine and Surgery)	91
Bachelor of Laws	175
Doctor of Medicine (Homœopathic Medical College)	19
Doctor of Dental Surgery	34
	410

HONORARY DEGREES.

Master of Arts	2
Doctor of Philosophy	1
Doctor of Laws	1

The whole number of degrees conferred, therefore, was 414.

The number of students in attendance was fourteen hundred and thirty, registered in the six departments and schools.*

The total of attendance exhibits an increase of 54 over that of the previous year, which itself was unprecedented in the history of the University. This increase is the more gratifying inasmuch as it has taken place in spite of more stringent requirements for admission and graduation, especially in the professional schools.

In the department of Literature, Science, and the Arts there were 3 candidates for the degree of Mining Engineer; for that of Civil Engineer, 8; Bachelor of Letters (English), 23; Bachelor of Science, 45; Bachelor of Philosophy, 35; Bachelor of Letters (Latin), 63; Bachelor of Arts, 210.

In connection with this enumeration it is worth while to observe that the courses of study, both in the schools of the State and in the University, are so organized and conducted that there is no difference in the completeness of instruction afforded to students who are candidates for the several degrees,

*See Schedule C.

whether classical or non-classical. While every student in the high schools and the University has absolute freedom of choice amongst the various courses or lines of study leading to different degrees, the facilities for learning in each of these courses, the privileges and the honors, are as nearly equal as the authorities of school and University can possibly make them. If there is any preference manifested in either direction, that preference is the result of the student's own judgment. No one is required to study for the classical degree rather than for another, nor do the authorities of the University offer any special inducements for the pursuit of one degree rather than another. For twenty-eight years the University has placed classical and non-classical studies on a footing of absolute equality, both in opportunities for acquirement and in rewards for successful attainment. I take occasion to emphasize this fact, because of the prevailing misapprehension which exists in this State and elsewhere as to the relative position held by the ancient languages in our educational plan.

Two facts are to be noted: first, that no one is compelled, in pursuing his education through the courses of study in the schools and the University, to spend any time whatever upon the classical languages; and, second, even if the student chooses the so-called classical course, the proportion of time actually devoted to classical studies in that course is but a small fraction of the whole time given to his education. This can be demonstrated at once by reference to the plan of studies long established in our graded schools, in connection with that of the University.

A Michigan boy or girl, commencing with the primary school passing through the high school and completing a course in the University for either of the four non-professional degrees, designated as bachelor's degrees, spends, on the average, about sixteen years in the work of education.

Of the four plans of study established in the best organized high schools, and connecting with each of the four plans in the University leading to these four degrees, one (leading to the degree of B. L.) admits *neither Latin nor Greek;* a second (leading to B. S.) requires in the high school an elementary course of about one year in Latin, as a preparation for the understanding of scientific terms, *but requires no Latin in the University;* a third (leading to the degree of B. L. Latin, or B. P.) requires Latin in the high school and University, but *no Greek;* and one (leading to the degree of B. A.) requires *both Latin and Greek* in the high school and University. Now the percentages of time spent by our youth on the average in the studies of the primary school and of these four courses or plans which follow the primary in high school and University, that is, in the whole sixteen years of his education for the bachelor's degree, are as follows:

	B. A.	B. L. (L.)	B. L.	B. S.
Mathematics	19	18	13	19
English	17	16	21	17
Modern Languages	.....	10	13	8
Ancient Languages	22	10	.....	2
History	2	2	3	4
Writing and Drawing	5	5	5	7
Sciences	9	12	15	30
Electives	24	25	28	11
Music	2	2	2	2
Totals	100	100	100	100

This table represents the percentages of time as arranged in the best schools of Michigan, combined with those of the University. That is, the youth who passes through school and University to the degree of Bachelor of Science gives two per cent. of sixteen years to Latin, eight per cent. to modern languages, and all the rest of his time to English and scientific studies. The candidate for the degree of Bachelor of Letters in English gives no time at all to ancient languages, thirteen per cent. to modern languages, and all the rest to English and scientific studies. The Bachelor of Letters in Latin gives ten per cent., that is a little more than one year and a half in sixteen, to Latin, the same to modern languages, and the rest of his time to English and scientific studies; unless he choose of his own preference to add more to his knowledge of Latin. Lastly, the Bachelor of Arts gives twenty-two per cent., or a little more than three years in the sixteen, to classical studies, with the privilege also of adding more to this kind of study if he prefer to do so. The remainder of his time, too, that is, a little less than thirteen years, is devoted to English and scientific studies, and, if he desire, to modern languages.

These facts show plainly enough that the complaint sometimes made, that an excessive amount of time is spent by the schools as well as by the University upon the classical studies, is entirely unfounded; and, also, that any deficiency which may exist in the education of our youth in the English language and in scientific studies cannot be attributed to undue attention to the ancient languages. We should also remember, and the fact, I apprehend, is not generally understood, that one-half the time given nominally to the teaching of Latin and Greek, even in the classical courses, is in reality employed under good and true teachers, in the most practical and useful kind of study in English; for the labor of the class-room consists largely in severe and critical questions as to the usage of English words and phrases. Whatever complaint may be made of the one-sidedness of education in some of the schools and universities elsewhere, whatever complaint Jules Ferry may make of the excess of the classics in French education, it is evident that such censures have no application whatever to this region, and especially to Michigan. We are in no danger of too much literary culture here. In fact, these figures show that our inquiry should be, and that, too, with some solicitude, not what harm the "dead languages" are doing, but what becomes of the thirteen or sixteen years of the precious time of education given exclusively to English and scientific studies; and what kind of teaching is it which leaves our children and youth, after this large part of life devoted to these branches, so ignorant of them that there is no alternative in defense but to cry out that the classics are to blame? One might suspect that these things would be better learned and understood even if more time were given to the classics. It will be noticed that the period here mentioned of thirteen or sixteen years, devoted to non-classical studies, does not include our professional education, which would, if added, extend the period to sixteen or nineteen years.

That this subject may be still more distinctly presented, I append a table showing the proportions of time assigned to various studies in the University and the schools separately.*

The continuity of the studies in the local schools of the State and in the University, suggests a remark on the working of the plan of school visiting and inspection, adopted by the Literary Faculty ten years ago, and usually called "the diploma system." According to this plan, candidates for admission to the Literary Department, holding the diploma of any Michigan high

*Schedule E.

school, which has been visited on the request of the school board by an examining committee of the faculty, and approved, are admitted to the University without examination. This innovation on old customs, like all innovations, and chiefly because it was an innovation, was met at once with severe criticism, and especially by some distinguished educators in the older colleges; fearing, as was alleged, that such a system would bring down the standard of scholarship. Experience, however, just as in the case of the admission of women to the University, an innovation made at the same period, has proved that there was no ground for fear, except that the thing was new, and not practiced in the mother colleges. Two facts are to be noted among the results: first, the standard of preparation in the high schools, if affected at all, has been elevated rather than lowered; second, the State system of education has become a reality. It is obvious that there can be no system, properly so called, without an actual and living connection and communication among its members. By calling for the visiting or examining committees of the faculty, the high schools have been brought into that vital connection with the University which makes them parts of an actual organism, and, so far as concerns these schools, our State system no longer exists merely on paper.

There are now sixteen of the most flourishing and important high schools of the State holding this relation to the University; and no one can look into the condition of these schools without feeling satisfied that this connection has had the effect both to animate their students to more earnest effort, and to encourage and strengthen the teachers; while it has brought about a more perfect unity of plan and method in the schools of the State in general. In short, it gives to our schools, otherwise isolated, a bond of union and a centre of life. We are convinced, as the result of an experiment of ten years, that this coöperative plan, especially if entered into by the few remaining schools, and thus perfected, will give a character of consistency, solidity, strength, and efficiency to the educational work of the State, which will leave nothing further to be desired but the uninterrupted operation and movement of the system.

Nearly related to this subject is the question of the possible advancement of the Literary Department of the University from the condition of a German gymnasium or French lyceum, which it has occupied hitherto, in common with American colleges generally, to that of a genuine University Department of Letters and Philosophy. The traditional usage of American colleges, which closes up the work of education with the Bachelor's degree, and accustoms our youth to look upon that degree as the ultimate aim and end of all their studies, has left our liberal education very far below the proper standard, and notably below that of the German universities. In other words, our universities have given their strength chiefly to the work of secondary, instead of the higher education. How to make the needed transformation from this almost purely gymnasial work to that of the university proper, has been for some years the problem before the minds of university men.

It is manifestly difficult, if not impossible, to change the gymnasium into a university by merely building up a system of post-graduate courses, as a sort of annex to the old established curriculum of four years; for the post-graduate work will thus continue to be a mere subsidiary appendage, and the so-called collegiate department will still be the central and characteristic part of the institution. And, furthermore, the Bachelor's degree, conferred with imposing ceremonies upon the successive classes, will continue to be looked upon as the goal of educational work and the end of all perfection. I could almost venture to express the hope that the time will come when these Bachelors' degrees will

even be abolished, and that, instead of them, certificates of proficiency or maturity will be given, as in the German gymnasium, to those who are prepared to enter upon the proper university studies preliminary to the Masters' and Doctors' degrees; especially since the Bachelors' degrees, in the multiplication of our colleges and universities, have been made so easy of acquisition that they have well-nigh lost all significance. Now, it seems to me that our close connection with the public high schools, and the continuity of the courses of study in the University with those of the schools, give us just the opportunity we need to initiate the proper university work, and to make the Masters' degrees gradually take the place of the Bachelors'. For the schools will certainly advance steadily, though slowly, in the grade of their attainments, and thus the university students, being better prepared in the schools, will be enabled so much the sooner to commence their work for the Master's degree. And it is just here, I think, that our new arrangement of studies in the University, which has been called "the new departure," comes in to facilitate the transformation which we desire. For it emancipates the student from the trammels of fixed courses at the period when he is sufficiently advanced in age and discipline to choose and pursue his studies for himself as an individual, and according to his individual gifts, attainments, and necessities. And this is precisely the characteristic of university work for the Master's degree, as distinguished from gymnasial or lyceum work for the Bachelor's degree. It is probable that this freedom, or liberty of individual advancement, under the favorable circumstances I have spoken of, offering to the student so much encouragement to look beyond the Bachelor's degree, and to remain in the University until he can become a Master, will sooner or later throw the former into the shade, and make the Master's degree the aim of all the more talented and enterprising students. And this probability is strengthened by the constantly increasing number of candidates for the advanced degrees.

I think that every encouragement and incentive should be given to undergraduates to look upon this as the true end and aim of university studies. And thus, I trust, though some of us may not live to see it, that the secondary education may be placed where it belongs. Our faculty should as soon as possible cease to expend all their time and strength on that which ought to be the work of the high school, thus compelling our more ambitious students to resort to foreign universities to obtain their higher education. For they should get their whole education at home. As one of the most intelligent and patriotic of ancient writers, the Younger Pliny, says, "Our youth should be educated in the land of their birth, resorting to the schools of their own country, and learning to love their native soil."

In connection with the statistics of the year, it may be of interest to notice that in the attendance of women there was a slight increase over that of the previous year, while the proportion to the whole number of students was somewhat less. There were in the department of literature, science and the arts, 81; department of medicine and surgery, 43; law department, 1; homœopathic medical college, 8; school of pharmacy, 2; dental college, 3; total, 138.

Fifty-nine of the women in the literary department were candidates for degrees, as follows: Bachelor of Letters, 7; Bachelor of Science, 3; Bachelor of Letters (Latin), 21; Bachelor of Arts, 28; total, 59. There were 22 pursuing selected studies, and not candidates for degrees.

Of the fourteen hundred and thirty students in attendance, six hundred and forty-three were from Michigan; and of these, two hundred and fifty-one were

in the literary department. Thirty-five other States were represented; most largely, Ohio, Illinois, New York, Indiana, and Pennsylvania. There were also students from England, Prussia, Japan, Burmah, Hawaii, the Bermudas, and the provinces of Ontario, Quebec, and New Brunswick. The fees for matriculation and other purposes received from the seven hundred and eighty-seven students outside of the State amounted to about $30,000.

In all the professional schools there has been an increase of attendance, excepting the law department, in which there was no material variation from the usual number. In the department of medicine and surgery the increase of numbers and the extension of the course to three years, with the accompanying division of the school into classes, will call for some modification of the present arrangement of lectures, the details of which must be determined by conference of the faculty with the board. The condition of the department and its urgent wants are fully set forth in the Dean's report.

The homœopathic college is gaining gradually in numbers. The question of an addition to its corps of professors must soon be considered; and perhaps such an addition, if attainable before the opening of another year, may be of advantage in relieving the burden of the department of medicine and surgery.

The amphitheaters now connected with the hospitals of both medical schools and the clinics, greatly multiplied by the number of patients resorting to both hospitals, have added immensely to the value of our medical education, while they have proved an inestimable boon to the sick and suffering from all parts of the State, as well as from abroad. The whole number of patients treated during the year, in both departments, was upwards of one thousand eight hundred.

The law school, which of all the departments of the University, has from its organization, twenty-one years ago, to the present day, moved on with the least interruption and irregularity, and with the most perfect harmony, has passed through the year with its usual prosperity. The enlargement of its faculty by the addition of a new chair, named after the first president of the University, the honored and venerable Dr. Henry P. Tappan, and the appointment to this chair of one of our most distinguished citizens and most eminent lawyers, the Hon. Alpheus Felch, have added greatly to the efficiency and usefulness of this department. An opportunity has thus been afforded to the law students, especially to those of the first year, for daily class recitations and examinations, in addition to the usual course of lectures. It is to be regretted that the department, by the intrusion of the University library, is still deprived of the use of a large portion of the building originally intended for its exclusive accommodation. I hope that the necessity for this kind of trespass will soon be removed. The law department needs all the space contained in the building, and even more. The earnest appeal on this subject, contained in the report of the Dean of the law faculty, I doubt not, will receive from the board all that consideration which the urgency of the case demands. And I would remark here that the interests of the whole University, not less than those of the law department, make it imperative that new accommodations should be provided as speedily as possible for the general library. The entire inadequacy of the apartment which it now occupies in the law building, the great disadvantage we are suffering in its use for the want of more room and a better location, will be brought to your attention by the committee of the faculties on the library.

The interesting report of the Dean of the school of pharmacy indicates the continued success of that department. The papers written by its professors

and students have been published extensively, and quoted with approbation in the principal pharmaceutical journals of this country as well as those of England and Germany. To our school have been assigned for several years by the National Society of Pharmacy some of the most important subjects of investigation in chemical analysis, to be reported to that society. Without any doubt, the industry and distinguished attainments of its officers, and the enthusiasm, success, and rapidly growing reputation of its graduates have given our school a position at least as high as that of the best schools in this country. I bespeak your attention to the detailed report of the Dean of the faculty; and also, as a kind of exponent of the high aims and success of the school, to the accompanying report of the scientific publications of the Dean himself during the long period of his faithful service, and to the notice of a new method of chemical study originated by another professor of the school, taken from the *Chemical News* of London.

The dental school continues to justify the provision made by the legislature for its organization and support. It is steadily growing, and its good service to the important profession which it represents is already widely appreciated. In creating this school, as well as that of homœopathic medicine, the legislature undoubtedly did not intend to do its work by halves, and will continue to afford the necessary means not only for sustaining, but for strengthening both of these faculties; so that both may do full justice to the responsible work which has been placed under their charge.

The University now possesses four laboratories; that of analytical and applied chemistry, which is often styled by distinction "the Laboratory;" the laboratory of general chemistry, the physiological laboratory, and the physical laboratory. The work of the first two is carried on in the laboratory building; the dimensions of which it has been found necessary to enlarge, in order to accommodate the increasing number of students. The work of the physiological laboratory is conducted in the medical building, and the physical laboratory is connected with the lecture room of the professor of physics. The equipment of all the laboratories has been much improved, and the work performed is greatly promoting the study of science in these several branches.

Not the least interesting and important work of the University is that which comes under the designation of microscopy. A large supply of instruments has been furnished to the students of physiology and analytical chemistry, and of natural history. Their investigations under the direction of skillful microscopists, pursued with no little enthusiasm, have secured the good results which were anticipated; particularly, accuracy of observation and precision of knowledge.

The astronomical observatory will soon be in a condition, on the adjustment of the instruments received from Washington, to prepare students for the practical part of astronomical study. The peculiar work of the observatory, now, as heretofore, somewhat embarrassed by the want of a larger corps, is conducted with marked ability and success. The time and labor of the professor are devoted not less to instruction and lecturing in theoretical and general astronomy than to the work of the observatory.

The general library has within the last two years become even more important to the intellectual success of the University than ever before. The great changes which have been introduced in the plan of instruction and method of study have made the library, instead of the text-book, to a large extent, the apparatus for study and preparation for class-room examinations. The breadth and depth of scholarship, and I may say, the manhood, which this kind of investigation promotes, should be encouraged. To this end, greatly enlarged

intended to accompany the President's report.* The reports of the professors, however, do not represent minutely the actual amount of labor necessarily involved in their work. I hardly need remark to the board, that a lecture, or class exercise of any kind, exacts much greater outlay of time and strength than the hour devoted to the class. I append also a tabulated statement, prepared by the Secretary, of the studies pursued under the academic faculty, and of the number of students attending upon each.†

While we entertain just feelings of pride in the progress which this institution has made in the brief period of its existence, we must not close our eyes to its deficiencies. It still comes far short of the noble idea which was embodied in its original plan by the founders of the State and of the University. Their views were so comprehensive and complete that with all our endeavors we can scarcely hope in less than one more generation at least, to reach the outside limit of their scheme. The idea which they left to our inheritance, and which embraced both the University and the whole body of public education, has become identified with the life and growth of the State. It is in substance this: That no son or daughter of Michigan shall be compelled to resort to any other state or country in order to acquire any knowledge or discipline necessary to the welfare of the citizen and of the State. Every educational want shall be provided for here at home just as perfectly as if no other state nor any private institution were in existence; for the State has no right to expect its work to be done by any other state, much less by any private corporation. Nothing shall be left to chance, caprice, prejudice, or narrowness. The existence and happiness of the commonwealth require that every one of her children shall be guaranteed the opportunity of making the most and best of himself. Moreover, the State must protect itself from imposition, charlatanism, and quackery in the professions which deal with the interests of life and property; it must have safe and skillful physicians, and sound and trustworthy lawyers. Besides this it must have well-trained teachers for its youth; scientists who will enable it to understand and develop its natural resources; civil engineers and architects who will make buildings and bridges which will not imperil life; mining engineers who will render available its great mineral deposits,—mining engineers not trained in New York or New Haven, but in Michigan, a mining state. And finally, it must have, sooner or later, those who will minister to life through the refining influences of art; for art, too, was included in the original plan of our education, and it is a want as real as any other which education supplies. Therefore, the State, for its own ultimate welfare, must maintain the whole circle of professional and practical schools.

All these things entered into the conception of public education entertained by our state fathers; and their idea, I think, is fixed and ineradicable in the constitution and in the minds of the people. It is our privilege and duty to make this idea, so far at least as relates to the University, a reality. Under the good providence of God much has been accomplished; enough, indeed, to give us strong confidence in the final completion of the work.

In conclusion, I beg leave to congratulate the board on the prosperous condition of the institution placed by the State under their supervision, and on the promise which it affords of an auspicious future.

HENRY S. FRIEZE,
Acting President.

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*The reports of the Deans will be found in Schedule G; the reports of the various professors are omitted in this Report.—SUP'T PUBLIC INSTRUCTION.

†Schedule F.

to perpetual want. It is rich only in its students and its graduates. And it must hold up these before the State authorities—these, with its faithful efforts to do good service to the State, and to expend wisely the moneys committed to its trust, as the ground of appeal for continued sympathy, confidence, and support.

In the thirty-nine years since the doors of the institution were first opened, it has had under its instruction not less than *eight thousand students;* and now at the opening of a new year it has enrolled not less than *fourteen hundred and seventy*, and will probably register during the year not less than fifteen hundred. Of all those who have been under our instruction, *six thousand one hundred and sixty-six* have been graduated. These numbers indicate, so far as numbers can, the work which has been accomplished.

The expense of the State in sustaining the University thus far, including the appropriations of the last two years for building and other purposes, has been $570,000. The inventory just completed of the real estate and other property of the institution gives us a valuation of $681,442; one hundred and ten thousand dollars in excess of the cost of the University to the State for nearly forty years. This excess, or balance, over and above the outlay of the State Treasury, is due, partly to the donations of citizens and professors, but chiefly to the wise and skillful management of the Board of Regents in the use of the income which the University has received independently of the State.

If, therefore, our necessities, growing with our prosperity, compel us to look to the legislature for continued assistance, we can point to a record, as we think, of great success and usefulness in the host of youth we have helped to an education, and to a most faithful and even productive administration of our finances, as a just and reasonable argument for the continued generosity of the legislature.

Among the wants recognized by the University, in addition to that of a building for the general library, is that of a gymnasium for the promotion of the physical development and health of the students. Physical training is necessary both to health and manhood. A sound mind without the sound body loses half of its efficiency. For several years our students have been active in cultivating field sports and athletic exercises, in order to compensate, to some extent, for the lack of a gymnasium. They have also been making earnest and commendable efforts to raise the funds necessary for the erection and equipment of a suitable building. But the opportunities within the reach of students for creating such a fund are exceedingly limited; and they cannot hope, without assistance, to raise the requisite amount. The struggle which they are making deserves support and sympathy. It is said "the gods help those who help themselves." And the honorable legislature, they believe, will respond readily and generously to an application on the part of the Regents for an appropriation which, added to the amount obtained from various sources by the students themselves, will secure the building and the requisite apparatus.

In connection with improvements in building, will come up the question of the remodeling of the north wing of University hall for miscellaneous purposes, after the collections now deposited there shall have been transferred to the new museum building. It is desirable that some plan for the new arrangement of the space should be adopted, and the necessary expense provided for.

The Deans of the faculties of the professional schools, and the professors representing the various chairs in the academic faculty, have presented detailed reports of the work under their supervision, which will give an insight into the internal operations of the University during the year, and which are

TABLE II.

Studies in the Public Schools—Including the Primary and all other grades.

Studies.	Classical Course.	Latin Scientific Course.	Scientific Course.	English Course.
	Per Cent.	Per Cent.	Per Cent.	Per Cent.
English Language	30	30	31	35
Ancient Languages	16	8	4	0
Modern Languages	0	8	4	0
Mathematics	25	25	25	25
Natural Sciences	12	12	19	21
History	4	4	4	6
Writing and Drawing	10	10	10	10
Music	3	3	3	3
Totals	100	100	100	100

TABLE III.

Percentages in the University and Public Schools combined.

Studies.	B. A.	B. L. (L.)	B. L.	B. S.
Mathematics	19	18	13	19
English	17	16	21	17
Modern Languages	0	10	13	8
Ancient Languages	22	10	0	2
History	2	2	3	4
Writing and Drawing	5	5	5	7
Natural Sciences	9	12	15	30
Electives	24	25	28	11
Music	2	2	2	2
Totals	100	100	100	100

F.

TABLE.

Number of Students in the various Courses and present at Examination.

No. of Course.	Subjects.	No. of Students present at Examination.	No. of Recitations a Week.
	GREEK.		
I	Lysias	64	4
II	Thucydides	45	3
III	Demosthenes	47	3
IV	Plato; Lyric Anthology	10	3
V	Teachers' Course	15	1
VI	Homer	55	4
VIII	Lucian	26	2
IX	Aristotle; Aristophanes	9	3
X	Iliad; Philology	15	1
XI	Herodotus	6	2
XII	Sophocles	43	4
XIII	Greek Literature	71	1
XVI	Sophocles	7	4
	LATIN.		
I	Terence	92	4
II	Quintilian	81	4
III	Pliny's Letters	13	1
IV	Art Lectures	8	2
V	Teachers' Course	2	1
VI	Livy	89	4
VII	Horace (Odes and Epodes)	57	2
VIII	Ars Poetica; Juvenal	58	3
IX	Tacitus	15	3
X	Cicero's Tusculan Disputations	16	2
XI	Art Lectures	62	1
XII	Teachers' Course	24	1
XIV	Seneca	10	1
	SANSKRIT.		
I	Elements.	7	2
II	Elements.	3	1
	MATHEMATICS.		
I	Algebra	114	4
II&VI	Gen. Geom. and Calculus	78	4
III	Advanced Calculus	14	5
IV	Determinants	3	1
V	Geometry and Trigonometry	106	4
VII	Modern Geom. and Trilinear Co-ordinates	1	2
VIII	Quaternions	3	2
IX	Calculus of Variations	4	2
X	Trigonometry	6	2
XI	Analytical Mechanics	10	4
	FRENCH.		
I	Grammar	75	4
II	Idiomatic Analysis	63	4
III	Classics (Racine, Moliere)	25	3
IV	Romantic Dramas	9	2
V	Grammar; Reading	63	4
VI	Idiomatic Analysis; Composition	44	4
VII	Literature—16th Century	9	3
VIII	Literature—19th Centnry	27	3
	GERMAN.		
I	Grammar	117	4
II	Iphigenie	68	5
III	Grammar	103	4
IV	Lessing's Laokoon	31	2
V	German Literature	12	2
VI	Faust	49	3
VII	Gothic (Ulfilas)	1	2
	ITALIAN.		
I	Grammar and Reading	35	2
	ENGLISH.		
I&VII	Grammar and Speeches	133	2
II & VIII	Rhetoric	60	2
IV	Anglo-Saxon	18	2
VI	Masterpieces	44	3
IX	Transitional Eng. period	17	2
X	Modern English period	64	2
XI	Shakespeare	27	3
XIV	English Drama	46	1
	HISTORY.		
I	Bright's Hist. of England	68	3
II	Guizot—Civilization	57	3
III	Polit. Hist. of England	39	2
IV	Seminary	34	2
VI	Hist. of America	66	2
VII	Continental Europe	25	3
IX	Bright's Hist. of England	65	3
X	Von Holst	47	2

TABLE—CONTINUED.

No. of Course.	Subjects.	No. of Students present at Examination.	No. of Recitations a Week.
XI	Government of England..	133	2
XII	Seminary	30	3
XIV	Von Holst	18	2
	PHILOSOPHY.		
I	Psychology	84	2
II	Ethics; Spec. Philosophy	21	5
III	Logic	72	2
IV	Hist. of Philosophy	18	5
	SCIENCE AND ART OF TEACHING.		
I	Practical	31	2
II	Historical and Critical	74	2
	POLITICAL ECONOMY.		
I	Text-Book	84	2
II	Lectures	34	2
	INTERNATIONAL LAW.		
	Lectures	57	2
	PHYSICS.		
I	Short course	47	3
II	Long course	43	5
III	Laboratory Work	4	5
IV	Laboratory Work	9	3
VII	Theoretical Physics	1	2
VIII	Problems	9	1
	GENERAL CHEMISTRY.		
I	Experimental	50	3
II	Lectures and Experiments	39	5
III	Kinetic Theory of Gases..	7	2
IV	Laboratory Methods	4	3
V	Laboratory Methods	8	5
	ANALYTICAL CHEMISTRY.		
I	Qualitative	13	10
V	Quantitative	10	7
Va	Quantitative	3	5
Vb	Quantitative	3	2
VIII	Physiological Chemistry.	6	3
IX	Assaying—wet and dry..	7	3
X	Blow Pipe Analysis	7	2
XII	Assaying—dry way	5	2
	MINERALOGY.		
I	Short Course	10	2
II	Full Course	2	5
	ASTRONOMY.		
I	Theoretical	1	5
II&VI	General Astronomy	27	3
III	Spherical and Practical..	10	2
IV	Theoretical	2	5
V	Meteorology	6	2
	GEOLOGY.		
I & II	Facts and Doctrines—Oral Exercises	35	3
III	Palæontology	7	2
IV	Advanced Palæontology.	1	5
V	General Geology	4	1
V& VI	General Geology and Oral Exercises	20	2
VII	Advanced Palæontology..	2	5
VIII	Economic Geology	3	4
IX	Geology of U. S.	1	2
	ZOOLOGY.		
I	Systematic	51	5
II	Invertebrates	2	5
III	Comparative	40	5
IV	Identification of Vertebrates	12	5
V	Entomology	10	3
VI	Advanced Course	2	5
	BOTANY.		
I	Cryptogamic	7	5
III	Structural	26	5
IV	Advanced Botany	4	3
	DRAWING.		
I	Geom. Drawing	16	2
II	Lettering & Topography	13	2
IV	Free-hand	38	3
V	Descriptive Geometry	12	3
VI	Shades and Shadows	7	3
VII	Free-hand	14	3
VIII	Water-colors	2	2
	SURVEYING.		
I	Transit and Level	15	3
II	Solar Compass	14	2
III	Advanced Surveying	12	5
IV	Field work	8	*
	CIVIL ENGINEERING.		
I	Strength and Resistance.	5	2
II	Theory of Construction..	5	2
III	Graphical Analysis	3	1
IV	Engineering Design	2	5
V	Machine Drawing	10	2
VI	Machinery; prime movers	5	3
VII	Applied Mechanics	14	1
VIII	Theory of Construction..	2	4
IX	Hydraulics	2	1
X	Stereotomy	9	2
	Metallurgy	7	3

*No regular time.

G.

REPORTS OF DEANS OF FACULTIES.

I.

THE DEPARTMENT OF LITERATURE, SCIENCE, AND THE ARTS.

The nature and amount of the instruction given within the past year in the department of literature, science, and the arts is explained in sufficient detail in the reports of the various professors. One subject, however, of no little public interest, has received the attention of the academic faculty as a whole, and may, therefore, with propriety be reported upon by the dean of the faculty.

Under the so-called diploma-system, students who have completed their preparatory studies in those high schools of Michigan which have been approved by special action of the faculty, are admitted to the University without further examination. This system has now been in operation since the fall of 1871, a period of nine years.

It has seemed, on the whole, to work favorably, both for the University and the schools. In order, however, to ascertain more definitely what has been the degree of success obtained in the working of the system, a committee of the faculty, consisting of Professors Pettee and Beman, was appointed in April last, to take into consideration the general subject of the standing in college of students admitted on diploma, compared with the standing of those admitted on examination.

As a preliminary step in the inquiry, the committee collated and arranged in systematic form the results of the college examinations for the first year of all the students admitted to the several freshman classes from the fall of 1871 to that of 1879, inclusive. It was not thought necessary to take into account the results of examinations in subsequent years. A year in college ought to be sufficient to obliterate distinctions, if any exist, arising from differences in the preparatory schools. The labor of arranging the results of the examinations was very great, involving a study of the records of more than one thousand different students and the tabulation of the results of nearly ten thousand examinations. The tables which contain the detailed record have been so arranged by the committee as to show at a glance what examinations each student passed, and in what he failed or was in any way deficient.

From these tables of details a careful summary was made for each semester of the nine years covered by the investigation. In these summaries the results of work done by diploma students are shown distinct from the results of the work of the students admitted on examination, and the percentage of success for each group of students is given. In addition to the summaries by semesters, tables were prepared to show the annual averages for each class of students, and a few other matters of interest bearing upon the general subject. The percentages of success were obtained by dividing the number of examinations successfully passed by the total number that, by the rules of the faculty, ought to have been passed. From these tables of details and the summaries, the committee have also compiled the tables printed below.

Students have been admitted on diploma from sixteen different schools. Table A below shows the actual average attendance of diploma students from each of these schools for each of the nine years during which the system has been in

operation, and the average attendance of students admitted on examination for the same period. The fractions which appear in this table arise from the fact that an odd number of students left college at the end of the first semester, or that an odd number of students, who were not present the first semester, joined the classes of the second.

The percentages of success of the two great groups of students for each of the nine years, and the averages for the whole period, are given in table B. It will be seen that the percentage is in favor of the students admitted on diploma.

In every year a greater or less number of matriculated students, who begin work in the several classes, are obliged to leave college before the end of the first semester; and others, after completing the work of the first semester, leave before the end of the year. Without inquiring at all into the causes of leaving, the committee compiled a table to show how far these removals from college affected the numbers of diploma students and of examination students, respectively, in their first college year. The result of this inquiry, given in table C, is that a smaller percentage of the students admitted on diploma have left college than of those admitted on examination.

TABLE A.

Average attendance of Students admitted on Diploma and of Students admitted on Examination for the nine Years, 1871-72 to 1879-80.

Schools.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Total.
Adrian	1	1	3½	----	1	----	----	----	----	6½
Ann Arbor	14	24	28	38½	37½	25	32	24½	29½	253
Battle Creek	----	----	----	----	2	1	2	2	----	7
Coldwater	----	----	2	4	1	4	2	1	2	16
Detroit	3	----	3	7	3	1	6½	10½	7	41
East Saginaw	----	----	----	----	----	----	----	----	7½	7½
Fenton	----	----	----	----	3½	1	2	1	3	10½
Flint	7	5½	2	1	1	1	2½	4	1	25
Grand Rapids	----	----	1	3	----	4	8	6	4½	26½
Jackson	7	3	5	1	----	4	3	2	----	25
Kalamazoo	3	1	----	----	----	----	----	----	----	4
Mich. Military Academy	----	----	----	----	----	----	----	----	5	5
Niles	----	----	----	----	----	4	----	----	----	4
Pontiac	----	----	4	6½	3	4	2	5½	1½	26½
State Normal School	----	----	----	----	----	----	1	----	----	1
Ypsilanti	----	----	8	1	----	1	----	1	----	11
Total diploma	35	34½	56½	62	52	50	61	57½	61	469½
Examination	116	74½	53	42½	45	63	48	75	57½	574½
Total	151	109	109½	104½	97	113	109	132½	118½	1044

TABLE B.

Number of Students in attendance and the Average Percentage of success, for the nine Years, 1871-72 to 1879-80.

		1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Total.
Diploma.	In attendance.....	35	34½	56½	62	52	50	61	57½	61	469½
	Percentage of success..	85.77	84.96	80.04	94.58	86.80	86.90	95.81	90.54	90.57	88.91
Examination.	In attendance.....	116	74½	53	42½	45	63	48	75	57½	574½
	Percentage of success..	84.47	87.23	87.18	85.97	86.70	86.29	89.47	89.71	89.51	87.22

The cases of bad failure in college work are about equally divided between diploma and examination students. The basis of comparison adopted by the committee in investigating this phase of the subject was the more or less complete failure in three or more examinations in a single semester. Table D shows the number of these exceptionally bad failures for each group of students for each year. For the whole period of nine years, there were in the aggregate fifty-eight cases of bad failure among the diploma students, and seventy such cases among the examination students. To make the comparison just between the two groups of students, the proportion of bad failures relatively to the total amount of work, reckoned by semesters, was ascertained. From the first of the above tables (A), it will be seen that the total attendance of diploma students for the nine years is 469½. Consequently the total work done by this class of students is represented by 939 semesters. In a similar way the work done by students admitted on examination will be found to amount to 1,149 semesters. Of these numbers the fifty-eight and the seventy bad cases of failure are respectively 6.18 per cent (for diploma students), and 6.09 per cent (for examination students).

TABLE C.

Number of Students who left College in the Freshman Year, for the Nine Years 1871-72 to 1879-80.

		1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Total.	Per cent.
Diploma.	Number enrolled in class....	40	35	61	67	56	55	68	67	65	514	....
	Left before examinations of first semester.....	3	....	4	4	2	4	5	7	2	31	6.03
	Left during second semester.	4	1	1	2	4	2	4	4	3	25	4.86
Examination.	Number enrolled in class....	123	92	68	49	53	64	60	79	59	647	....
	Left before examinations of first semester.....	3	16	14	5	7	....	10	3	....	58	8.96
	Left during second semester.	8	3	2	3	2	2	4	1	2	27	4.17

TABLE D.

Distribution of the Cases of Bad Failure for the Nine Years 1871-72 to 1879-80.

	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Total.	Per cent.
Diploma	5	6	6	3	9	10	2	1	6	58	6.18
Examination	9	6	7	8	7	16	4	7	6	70	6.09

The tables prepared by the committee also throw a little light upon the practical working of the elective system; though the results of two years alone are too few to found any very broad generalization upon. Prior to the general introduction of the elective system the work of the freshman year was so arranged that, as a rule, all students were required to do the same amount of work, viz., the equivalent of three exercises a day for five days in the week; or, expressed as it would be under the new system, fifteen hours a week. For the last two years a considerable freedom of choice in the election of studies has been allowed, and it thus becomes important to know which class of students has done, on the average, the greatest amount of work. As a partial answer to this question the following table is given:

TABLE E.

Number of Hours of Work elected by Freshmen, for the two years, 1878-79 and 1879-80.

	1878-79.			1879-80.			
	1st Semester.	2d Semester.	Average.	1st Semester.	2d Semester.	Average.	for Two Years.
Diploma students	15.52	15.73	15.63	15.55	15.40	15.48	15.55
Examination students	14.96	16.28	15.62	14.72	15.12	14.92	15.32
Twenty-one-year students	11.45	13.16	12.31	13.50	13.92	13.70	12.96
Total	14.49	15.49	14.99	14.83	15.02	14.93	14.96

An inspection of tables E and B brings us to one other interesting conclusion. During the first seven years of the period under review, that is, before the adoption of the elective system, the attendance was regularly fifteen hours a week, and the percentage of success was, for diploma students, 88.36, for students admitted on examination, 86.50. During the past two years, that is, since the adoption of the elective system, the attendance has been, of diploma students, 15.55 hours a week, of students admitted on examination, 15.32; while for the same period the percentage of success has been, for diploma students, 90.56, and for students admitted on examination, 89.61. Thus it appears that although the number of hours taken by the students under the elective system is slightly greater than was the number taken under the old system, the percentage of success is also somewhat higher.

C. K. ADAMS.

II.

The Department of Medicine and Surgery.

In compliance with your request, I have the honor to make the following statements respecting the work done in and the needs of the department of medicine and surgery.

The attendance during the past year has been greater than that of the preceding, notwithstanding the lengthening of the term to the full college year, and the requirement of an additional year of college work, or the attendance at the college of three years of nine months each. During the year the usual amount of didactic instruction has been given, and the amount of teaching and labor in the hospital and clinical amphitheatre has greatly increased.

The work in the various laboratories—chemical, anatomical and physiological—has been vigorously pursued, and all the members of the teaching corps have been present and faithful in the discharge of their duties.

Besides the labor performed in the department of medicine and surgery, several of the faculty have given instruction in the dental college, delivering special though short courses of lectures adapted to the wants of the students in that department.

The increase of the number of students in our own department, and the presence of students from other departments at our lectures have greatly embarrassed the faculty, and seriously incommoded the students by want of sufficient seats in the lecture rooms, and several of our students who matriculated have left because they were unable to procure proper places.

The division of the class which we are now endeavoring to effect will diminish, it is hoped, the crowding in the lecture rooms, but will greatly increase the labor of the faculty—so much so that, without increase of assistance, full justice cannot be done to students, especially while so many not belonging to our classes are crowded into our rooms.

The repeated presentation of claims for increased expenditure is by no means agreeable to the faculty, and may be annoying to the Regents; but the continued expansion of the science and the art which we teach, and the increased number of students seeking our instruction, present increased needs which are imperative, and force us to request that while the number of students now taught continues, an increase of assistance be afforded. Our lecturing force may perhaps be sufficient, but we need more aid in questioning or drilling on the subjects of the lectures, and in text-book drill.

In most of the large schools in New York and elsewhere, special instruction is given outside of the faculties, for which additional, and, in some cases, large fees are charged. As but few students are able to pay these fees, a large majority of the students do not secure this kind of teaching. To encourage or even allow this system of charging is contrary to our policy and our profession. We promise a complete medical education, at a low rate of fees, demanding time, talent, and knowledge, rather than money, and we are convinced of the importance of more personal drill and recitation from books; this cannot be had with bodies of several hundred together. It requires division into sections of moderate numbers; and this work it is impossible for the professors to do, with the number of lectures they have to give, and to repeat to the women connected with the department.

We feel the more confidence in calling your attention, and the attention of the Regents, to this subject, as the faculty of our sister department of the law

have found it important to employ an able and distinguished member of their profession to do for their students this kind of work.

Our faculty are striving to make the department of medicine and surgery a model of its kind, and more work in this direction is necessary for the purpose. The work needed to be done requires ability and experience such as will command compensation. The compensation need not be large, but it should be such as to secure more continued service than will be rendered by young men for the honor of having their name appear in the calendar.

The hospital requires most imperatively a greater number of assistants, and the same persons who render skilled assistance there might aid in teaching students. We do not see how assistance of this kind can be dispensed with; for even if relieved from instructing students in other departments, it would be impossible for members of the faculty to perform all the work in drill and recitations required. The hospital and clinical work has so largely increased, that those engaged in teaching the practical branches are now devoting so large a share of their time to duties in the hospital and clinical amphitheatre, that the work of reviewing and instructing the class in sections cannot be performed by them.

The plan to which attention has been called on former occasions, of interesting the State directly in the hospital, making it an institution for receiving the patients from the State school at Coldwater, and from the different counties, patients afflicted with diseases which cannot be so conveniently treated outside of a hospital supplied with all the necessary appliances and in the charge of those who devote special attention to particular diseases, has been received with much favor in different quarters; and the faculty again express their willingness to undertake the additional responsibility and labor which an enlargement of the hospital and the receiving of that class of patients would involve. We do not doubt it would be a matter of economy to the State, and we hope it would be the means of restoring to comparative health and the power of self-support some, at least, who would otherwise require the continual support of the State.

A. B. PALMER.

III.

The Department of Law.

The faculty of law in reporting upon the work of the last year have only to report general prosperity and satisfactory progress. Unfortunately the health of Professor Wells failed before the beginning of the college year, and it became necessary to secure some one to take his place while his disability continued. Our former associate, Professor Charles I. Walker, LL. D., on being applied to, kindly consented to give the department the benefit of his services, and remained with us during the year. The attendance of students was large, being in all 395, of whom 175 received the degree of bachelor of laws at the annual commencement in March.

The Tappan professor gave his services through the year to those students who were not applicants for a degree. For the more thorough instruction of those students it was found necessary to divide them into two sections; but this was only because of their great number, as each section took the same studies. The special exercises have consisted in systematic instruction in the rudimentary elements of the law, taking as text-books, chiefly, the com-

mentaries of Sir William Blackstone and Chancellor Kent. Portions of these works are regularly assigned for their study, and critical examinations are had upon them by way of recitations. These exercises, moreover, are always accompanied with such oral explanations and instruction as may seem needful to a full comprehension of the subject. As a general rule the young men appreciate the importance to their future progress and success in the profession of a thorough knowledge of the fundamental principles of the law, and as they become interested in these, devote themselves with commendable industry and zeal to acquiring a mastery of them.

The faculty of law deem it their duty to press upon the attention of the Regents, at this time more than ever before, their special wants and necessities. It is well known to you, as it is to others connected with the University, that two important interests have long suffered from comparative neglect when University funds were being appropriated. One of these is the University library, which has now for some fifteen years been imperfectly accommodated with what was intended to be, and should have been, only temporary quarters, in the law building. No one better than yourself can explain to the Regents how inconvenient this has been, but they can easily see for themselves if they will visit the room at almost any time during the college year. As the number of students who are pursuing post-graduate courses increases, the inconvenience is felt much more severely, and it will be greater and greater every year.

The other interest is that of the law department. If the University library were removed from our building, we should not have a foot of space in it which would not be needed for our purposes. Instruction suffers now for want of room, and it is quite impossible to subdivide our classes for examinations, as they need to be subdivided. The present law library room is also wholly inadequate.

The faculty of law have witnessed with pleasure and without a murmur the additional accommodations which from year to year have been provided for the medical schools and the school of pharmacy, and rejoice in those schools being able, by the aid thereof, to do full justice to all who come for instruction therein. They have not been disposed to push their own wants to the detriment of the schools named, or indeed to the detriment of any other school, or of any general interest. When the University has had means, their invariable desire has been that they should be so expended as best to subserve the common interest. Their disposition in this regard has probably led to their own needs being sometimes overlooked and discriminated against, and this has seemed especially plain to them during the last two or three years.

The great and paramount need of the University at this time, in our opinion, is better accommodations for the University library. For this purpose a building specially designed for the library is required. Its erection would accommodate and advantage every professor and every student in every school of the University, and would enable the library to be protected and increased. But its erection would accommodate the law school specially, because it would give to it the room it imperatively needs, and which of right belongs to it. It cannot be just that this department should any longer give up half the available space in its building for the accommodation of all the other schools, when it has not a foot to spare, and is suffering for the want of the whole building for its exclusive use.

The faculty most respectfully request that you urge this great need upon the

attention of the Regents. You can remind them at the same time of a fact to which we have already called their attention, that within our present limited quarters we can neither increase the number of our books, nor protect those we already have.

T. M. COOLEY.

IV.

The School of Pharmacy.

The number of students in the school of pharmacy during the past collegiate year has been eighty-one; comprising forty-seven in the work of the first year, thirty-four in that of the second year, and one graduate. The number completing the requirements and receiving the degree was twenty-three. For the past six years the average annual number of students has been seventy-two, and the average annual number of graduates has been twenty-four.

An advance in the requirements for matriculation, declared in December, 1878, has just now taken effect, for the entering class of the next collegiate year. One purpose in the adoption of this advance was to check an increase in numbers, an end which has been barely accomplished, as appears from the fact that at the present date forty-nine have entered for the work of the first year. Of these, twenty-nine, or fifty-nine per cent, were admitted upon diplomas and certificates of good standing in collegiate institutions.

Regarding the professional success of the school, good evidence appears in the station and employment of the alumni, as registered in the alumni list of the announcement of the school for the last year. Of the two hundred and thirty graduates, not including those of the present year, sixty-seven per cent. are in the practice of pharmacy and chemistry, including manufactures. Twenty-one per cent. have entered the profession of medicine. Of the twenty-five graduates of 1879, twenty-one were engaged in the practice of pharmacy before the close of that year, and three had entered on further studies in the University. The services of our graduates are most in demand in houses where our graduates have already been engaged, and especially for the duties of the prescriptionist. Also, several of the largest manufacturing pharmacists of the country obtain chemists from this school, and there is an increasing inquiry for our graduates to serve as analysts, especially for the detection of adulterations in articles of food.

Of the last graduating class forty-six per cent. had been engaged in the practice of pharmacy before entering their college work. The remainder enter upon the vocation in a subordinate capacity, to gain that experience obtained only in actual business, and having the good help of systematic training to enlighten the duties of appprenticeship.

The accomplishment of original work, as required for graduation, continues to be an object of earnest interest and no little labor. The thorough search of authorities and memoirs required in support of every investigation is much more difficult to obtain of the student, than is the faithful execution of the experimental work. To bring about more completeness in the search of authorities, on the part of the students, and to train them in the use of the literature of their profession, bibliographical subjects were assigned to three members of the last class. Fair results were obtained, encouraging us to persevere. One of the theses just named, an index to the literature of the solanaceous alkaloids, of one hundred manuscript pages, has already been obtained in copy for use in literary work, and it well deserves publication. Of the experimental investiga-

tions of the last graduating class, papers are being published in the American Journal of Pharmacy, Philadelphia; the American Chemical Journal, Baltimore; the Journal of the American Chemical Society, New York; New Remedies, New York; the Physician and Surgeon, Ann Arbor. Especially deserving of mention is a full and careful research on the "Cinchonas of Commerce," with original drawings from the microscope, to appear in the November number of the journal first above named. The subject of the assay of drugs containing alkaloids has been assigned to this school by the committee on Revision of the Pharmacopœia. This was first undertaken in 1878, on request of a committee of the American Pharmaceutical Association, and reports sustained by the work of four of our students were published in the proceedings of that year (pp. 806–838). The results were embodied and extended in the volume of the American Pharmaceutical Association's report on the Pharmacopœia, in 1879, and were criticised approvingly by the English journals, and published in full in several of them. Four members of our last class carried out trials of methods within the same field, and the reports of their work are engaged to the committee of revision, and nearly ready to be published.

The responsibility undertaken by our school, in contributing to the stock of learning in the profession to which it belongs, is indicated by a computation lately made by a member of the class of 1876, who finds that about forty-five per cent. of all our graduates have done work reported in the chemical journals of this and other countries. The greater part of our contributions for several years past appear, either in full or in brief, in the pharmaceutical year-books of England and Germany. Many of these reports are of brief extent, yet they serve to give our students a constituency in the body of learning and an interest in every study. Among those of larger import may be named a new analysis of the *Lobelia Inflata*, by a member of the class of 1877, prepared by him for The Pharmaceutical Journal of London; the discovery of a third alkaloid in Hydrastis, by a member of the class of 1873, continued by a member of the class of 1875, and published throughout; a general scheme of chemical analysis of plants by one of the class of 1876, given to The Chemical Journal of the Johns Hopkins University, last year, and widely republished; and analyses of waters before and after household filtration, by members of the classes of 1877 and 1879, published in the Chemical News, London, and in the report of the Michigan State Board of Health for this year. A brief method for the analysis of soaps, patiently worked out in our laboratory in 1874, and then very widely circulated in the publications, is of interest to us as being the first contribution of an alumnus of that year, who has since gained decided honors in the societies of chemistry and pharmacy abroad, now holding a responsible place in the faculty of the official school of pharmacy in England, where he has been active in original research. These evidences of the capability of our system of instruction, under the advantages generously afforded us by the University and the State, are presented for the encouragement of the friends of our school. Also, they attest the faithful industry and the good ability of the teaching force which the University has assigned to the studies of the school of pharmacy.

A schedule of the chemical laboratory work of the school of pharmacy is given, with the extent of each course and the duties of each instructor, in the accompanying report on *Applied Chemistry*. A summary of the other required studies of the school, including the number of students, the hours and duration of each study, and the extent of duty of each officer of instruction, is here appended:

	Number of Students.	Exercises* a week.	Duration of course.
1. General Pharmacy. PROF. PRESCOTT. Lectures and Recitations. Students in first year	44	2 to 3	22 weeks
2. General Chemistry. PROF. LANGLEY. Lectures, with a class in Department of Literature, Science, and the Arts. Students of the first year	42	3	14 weeks
3. Systematic Botany. ASST. PROF. SPALDING. Recitations and Practical Studies. Students in first year	50	5	12 weeks
4. Pharmacology and Micro-Botany	32		16 weeks
Lectures. ASST. PROF. SPALDING		2	
Lectures. MRS. STOWELL		3	
Laboratory work. MRS. STOWELL		3	
5. Materia Medica. Students in second year. Lectures, with Department of Medicine and Surgery. PROF. FROTHINGHAM	32	2	20 weeks
Recitations. DR. VAUGHAN	32	2	32 weeks
6. Inorganic Pharmacy. PROF. PRESCOTT. Students of the second year. Lectures	31	3	16 weeks
7. Organic Chemistry and Pharmacy. PROF. PRESCOTT. Students of the second year. Lectures	27	5	20 weeks

*An exercise in the laboratory requires two to three hours; recitations and lectures continue one hour.

Our school has two representatives, one from the alumni and one from the faculty, engaged on the committee for the decennial revision of "The United States Pharmacopœia," a work of much labor, for the common service of pharmacy and medicine.

We would not fail to present, through the president, to the Regents of the University, the grateful acknowledgments of every student and officer of instruction in our school, for the enlargement of the chemical laboratory. Though this enlargement has been more imperatively demanded for the large numbers of the other professional departments using it, surely no branch of the University will gain more upon the score of comfort derived from the additional room, than the school of pharmacy.

ALBERT B. PRESCOTT.

V.

THE HOMŒOPATHIC MEDICAL COLLEGE.

In behalf of the Homœopathic College of the University of Michigan, I transmit herewith a synopsis of the general educational and clinical work done in this department for the year ending June 30, 1880:

Course of Instruction.—The course of instruction just terminated has been more satisfactory to both faculty and students than that of any previous session, and the number of matriculates has increased over that of any preceding year. The educational course has been more comprehensive and thorough the past session than any preceding term, owing to our recent hospital accommodations and more extended clinical facilities.

Materia Medica.—The chair of materia medica has delivered during the term 72 lectures exclusive of repetitions, which aggregate 144 didactic lectures for the session of nine months.

Theory and Practice.—The chair of theory and practice has given 72 lectures and repetitions, which amount to 144 delivered during the session; these, together with the clynical work done by the same chair, give an additional 72 hours. As an addendum to this chair, Professor Wilson has given 20 didactic, and has added about 40 clinical, lectures on the diseases of the eye and ear, making a total of about 250 lectures delivered by that chair during the session.

The Chair of Surgery.—The work of this chair has been adapted as far as possible to the graded course; one-half of the term has been devoted to teaching the principles of surgery and minor surgery; the remainder to operative surgery, including a review of the former, making 72 first lectures, which with the seconds give the total of 144 lectures; these, with the clinical work twice a week of one and a half hours each, give a grand total of 252 clinical and didactic lectures during the term.

Gynæcological and Obstetric Chair.—Since the appointment of Professor H. C. Allen by the faculty to the Chair of Diseases of Children, Obstetrical and Gynæcological Diseases, created by the Board of Regents in March last, there have been delivered in this important branch of medicine about 30 didactic lectures, exclusive of about the same number of clinical hours devoted to the treatment of these diseases, making in the aggregate a total of 60 lectures clinical and didactic on these significant topics.

Hospital Work.—Since the opening of the hospital and amphitheatre, and the consequent increase in the number of patients, the clinical staff have had their labors largely multiplied. The uniform success that has followed their ministrations promises a rich harvest of clinical and bedside practice which will redound largely to the growth of this department of the University.

The Therapeutics of Gynæcology and Obstetrics.—A petition was presented to the faculty the present session by the students of the Homœopathic College, stating that they were deprived of instruction in this interesting branch of practice, and were consequently unprepared to enter upon the active duties of their profession. The Board, to whom this subject was referred, promptly created a chair with the view of having this important branch properly taught. The faculty were empowered to fill this chair, without compensation, and Dr. H. C. Allen, of Detroit, was appointed and entered upon its important duties to the entire satisfaction of both the faculty and students. The ability and fidelity which he brought to the work are attested partly by the summary of clinical and hospital cases treated by him since his advent to the chair. The faculty request that the Board will make this chair a permanent one with a suitable appropriation for its maintenance hereafter.

Examinations.—The faculty, with the idea of giving extended publicity to the thorough teaching that has marked this department of the University the past year, and for the purpose of reviewing the important subjects gone over during the long session of nine months, have instituted a plan of "Examination reviews," beginning on the 7th day of June and terminating on the 25th day of the month, by the examining board. The plan has proved so valuable and acceptable to the students who have participated in it, that it is proposed hereafter to begin such reviews on the first of June, for the benefit of all the classes in "the graded course."

The Examining Board.—The appointment of the Board of Examiners has produced a good effect in this, that it has separated to a certain extent the teaching and examining bodies, and has given an increased value to the diploma of this college, so as to make it sought after by those students of

medicine who prefer a thorough and systematic course of instruction. This, with the long term and the graded course, has placed this college at the very front of homœopathic schools in the country, and we believe that with a united and zealous faculty, it is soon destined to become the best patronized school in the land.

I take pleasure in attesting, in behalf of the faculty, our appreciation of the commendable manner in which the Examining Board has performed its functions, and the earnestness and ability with which it has accomplished the work allotted to it.

The Eckel Museum.—In consideration of a long personal friendship with the occupant of the chair of surgery in this college, J. N. Eckel, M. D., of San Francisco, California, has generously donated $50, and a like sum to be paid annually, to maintain a museum of anatomical and pathological specimens for the sole use and benefit of the homœopathic college.

Attendance Cards.—In behalf of the faculty, I request that the board will take some action touching the importance of giving to all our class who attend the lectures in the department of medicine and surgery, "attendance cards" showing their presence at such lectures. This is the rule in all well-appointed medical schools, and the absence of it works injuriously to our students, in this, that without these cards they are deprived of privileges in the Canadian school that others possessing them enjoy. The requirements of the College of Physicians and Surgeons of Ontario, the registration bureau that regulates the practice of medicine and surgery in the Canadas, require these "attendance certificates" to prove the qualifications of the applicant for a license to practice his profession. Until such an arrangement is entered into in behalf of the homœopathic college, we shall be deprived of the patronage of all such students from the Canadas who desire to become matriculates of the homœopathic department of this University.

I trust that the board will grant the above requests, which are presented solely for the best interests and future welfare of this college.

E. C. FRANKLIN.

VI.

The College of Dental Surgery.

The class during the period embraced by this report, numbered eighty-three, thirty-four of whom were candidates for graduation.

Attendance upon two courses of instruction is required for graduation. In many instance, however, three courses are taken instead of two; thus making the work easier and the instruction more thorough.

The following curriculum has been arranged with a view to grading the classes, and to accommodate those attending two and those attending three years:

First Year.—Anatomy, physiology, dissections, general chemistry, prosthetic dentistry, physiological laboratory (histology).

Second Year.—Review of first year studies; clinical dentistry, theory and practice of dentistry, pathology, materia medica, analytical chemistry, metallurgy (special).

Third Year.—Theory and practice of dentistry, clinical dentistry, pathology, therapeutics, special surgery (oral), diseases of women and children.

At the middle of the second year the student may be admitted to an examination on anatomy, physiology, general chemistry, and prosthetic dentistry.

This, if satisfactory, will be regarded as final. Prior to this he must make two or more satisfactory practical dentures, and also at this time present for deposit a denture that shall be acceptable to the faculty. At the end of the second year, in addition to the above, an examination shall be had upon the principles of pathology, materia medica, histology, and analytical chemistry. During and at the end of the third year, examinations shall be had upon the remaining branches of the course, and an exhibition of such tests of skill and ability as the faculty may require.

For those who may find it necessary to complete their course in two terms, the following schedule of studies has been prepared:

First Year.—Anatomy, physiology, dissections, general chemistry, analytical chemistry, theory and practice of dentistry, prosthetic dentistry, principles of surgery, materia medica, physiological laboratory.

Second Year.—Anatomy, physiology, pathology, theory and practice of dentistry, clinical dentistry, special surgery (oral), therapeutics, diseases of women, and children.

Under the embarrassments with which the work is surrounded, it has, as yet, not been found practicable to enter fully upon the work according to the plan. More room and additional teaching force are required.

The dental students attend almost the entire course of the regular medical instruction, embracing dissections, chemistry, and histology. In addition to this they have one lecture daily on operative or mechanical dentistry, and during about one-half of the term one lecture daily on special subjects.

The afternoon of each day is devoted to work in the clinical and mechanical branches. The work in the clinical room is under the direction of Dr. J. A. Watling, assisted by Dr. W. D. Billmeyer. The room for this work has a capacity for twenty-five students.

The dental laboratory is in charge of Dr. W. H. Dorrance, assistant and demonstrator, aided by Mr. G. W. Morgan and Mr. A. W. Hoyte. This room has a capacity for thirty-eight students.

During about half the term from fifteen to twenty students were distributed in the chemical laboratory, the physiological laboratory, and the dissecting rooms; during the remainder of the term more room was greatly needed. The best interests of those who apply for instruction require that this want should be supplied.

Another urgent need is the appointment of a professor of mechanical dentistry, with a thoroughly competent assistant. Without such aid it is impossible to make the instruction in this branch as thorough as it ought to be.

In view of the fact that so many of the students of this department remain after the close of the regular term to pursue such branches as may be open to them, it is here suggested that the interest of such would be promoted if provision were made for keeping open the clinical and mechanical rooms during that period. Hitherto, the work in these rooms has ceased at the close of the regular term in March. Such provision would certainly be an inducement for a greater number to remain, and at the same time would afford them greater advantages.

The service of one professor, with a good assistant, would be sufficient as instructors during this time. Those who have remained hitherto have regretted that the advantages which such an arrangement would afford were not offered.

J. TAFT.

AGRICULTURAL COLLEGE.

REPORT OF THE PRESIDENT.

Hon. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—Our fiscal year closes to-day, and I take pleasure in making a report to you of our affairs.

The botanical laboratory, for which an appropriation of $6,000 was made by the last legislature, has been completed, thus putting the botanical department into a home of its own, as we had previously done with the chemical department. Propagating pits have also been added to the greenhouse. The apiary was removed from its position to give room for the new laboratory.

The number of students in attendance during the year is shown in the following summary:

Resident graduates	13
Seniors	26
Juniors	38
Sophomores	57
Freshmen	83
Specials	48
Total	264

The faculty of instruction remains the same in character as the year before. Professor Geo. T. Fairchild, for twelve years professor of English literature, has accepted the presidency of the Kansas Agricultural College, and has been succeeded by Professor E. J. MacEwan.

The college graduated twenty-six, bringing up the total number of graduates to two hundred and eleven.

June 10th there was a pleasant gathering of the Executive Committee of the State Agricultural Society, the officers of the State Pomological Society, and of the State Grange at the college with the State Board of Agriculture and the officers of the college.

The college held its winter series of farmers' institutes as usual, and they were successful.

Respectfully submitted,

T. C. ABBOT, *President.*

AGRICULTURAL COLLEGE,
Lansing, Mich., August 31, 1880.

MICHIGAN STATE REFORM SCHOOL.

REPORT OF THE BOARD OF CONTROL.

Hon. C. A. GOWER,
Superintendent of Public Instruction:

SIR,—The board of control of the Michigan State Reform School take pleasure in presenting their annual report showing the condition of the institution at the close of the twenty-fourth fiscal year.

At no time in the history of the institution has it been in a more prosperous condition in every department, and that the work of the Reform School is being done satisfactorily, and the ends accomplished for which it was designed, is being constantly attested by assurances from county agents and parents and guardians of boys who have been submitted to our care, and discharged to assume the duties of life for which it has been the aim of our institution to prepare them. That the boys have entered upon their new spheres of usefulness in every way greatly improved by their residence with us, and giving promise of lives of usefulness in the future. At no time since the institution was first opened have so many gratifying assurances been received of the thoroughness and efficacy of our work as during the past year. This is extremely gratifying, not only to the board of control, but to the superintendent, to whom, in a large measure, is due the complete transformation of the institution from a prison to a home; with no guards to prevent the escape of inmates stronger than a reliance on the honor of those committed to our charge.

In regard to the management of boys at reformatories—how closely they should be watched and guarded to prevent escape, or to what extent reliance should be placed upon their honor alone, the most experienced managers have widely differed.

Taking it for granted that no boy is sent here unless he has in some way been made or made himself a fit subject for discipline, the question very naturally arises how to bring the discipline of a reformatory to bear upon him in such a manner that the ends for which he was sent may best be served. Considering the diversity of tastes and dispositions which combine in making up the boy nature, this must often tax the ingenuity of the superintendent and his experiments must frequently be attended with disappointment. The office is one which calls for energy, courage, patience, and firmness, and he who undertakes it cannot hope to succeed unless he does so in the spirit of the Master, who, while he ever rebuked sin and wrong, inculcated the forgiveness of injuries "until seventy times seven times."

In some of the eastern reformatories for boys, "trust departments" are

adopted, to which boys are assigned, whom the managers are willing to try, after an apparent amendment in their conduct has been effected in a "correctional department," and to which, in some instances, boys are admitted on entering the institution, should the managers deem it prudent to venture upon the experiment. We believe that it is unsafe to make such discriminations. We now endeavor to make our boys feel that it is a *privilege* to be in the institution, and that good behavior will be one of the conditions of remaining in it; that we depend upon their honor and sense of right; that our mission is to do them good and to prepare them to fight successfully the battle of life.

As an evidence of the successful working of this plan, we refer with satisfaction to the fact that escapes from the institution are almost unknown, and attempts to escape are exceedingly rare, and confined almost wholly to boys who have been in the institution but a very short time and upon whom our work of restoration has scarcely commenced.

The health of our inmates has continued remarkably good. No epidemic of any kind has prevailed at any time during the year, nor have we lost a single boy by death. This is as much a cause for surprise as for congratulation, as the majority of those sent to the institution are from the lower walks of life, and not unfrequently exposed to contagious diseases before coming here, many of them being victims of diseases inherited from vicious parents.

We have heretofore appealed to the legislature to provide some system of protection against the introduction of contagious diseases dangerous to life, and our belief has not changed that no boy should be admitted except with the certificate of a respectable physician that he is not infected with nor has been exposed to such diseases as would render his admission dangerous to our inmates.

In consequence of the extremely unfavorable season, our farm has not done as well as in some former years. We have, however, raised a sufficient quantity of vegetables to supply our own wants.

The boys have made commendable progress in the school rooms during the past year. Our teachers are efficient and pains-taking, and have zealously performed their duty with the most satisfactory results.

The work done in the several shops has been done well, and our boys have shown an unusual amount of determination to do their work in such a manner as shall merit the approval of the superintendent.

We have received numerous complimentary notices of the quality of our cane work, and confidently believe that no better work can be produced anywhere than is daily turned out by our boys. In this department, as well as in the school rooms, it is our endeavor to take advantage of every opportunity that offers to impress upon our boys the importance of self control and self respect, and that their efforts in this direction are calculated to secure for them the respect of those who are seeking their welfare and endeavoring to prepare them for the future responsibilities of citizenship.

We desire to call attention to the fact that the number of boys sent to the institution is annually increasing, and that consequently some arrangement should speedily be made to increase our accommodations, in order to keep pace with the demands of the times.

Among our most pressing needs is the erection of a chapel. The room now used for that purpose is too small and inconvenient and is greatly needed for other uses. We ask for an appropriation of $10,000 for this purpose, and trust that our appeal will not be in vain.

A new roof is needed upon our main building. The present roof has been patched and repaired to such an extent that, considering its present condition, it is not deemed in the interest of economy to expend anything more upon it. We have estimated the construction of a new roof will cost $2,500.

We need a new barn, which ought to be built at once, and will cost $1,250.

A need long felt is the erection of a winter hall, to which the boys may resort for needed exercise and recreation during the winter months and in inclement weather. Of this we have carefully estimated the cost and find it will require an expenditure of about $1,500.

Upon our grounds, immediately east of and near the school, is a swamp, which as long as it exists in its present condition is dangerous to the health of our inmates and employés. The surface is so very low that it cannot be drained by a ditch or sewer less than a mile in length, and after much careful thought we have decided that the most practical way to treat it will be to fill it up, and this will require an expenditure of $1,500.

For current expenses of the institution for the years 1881 and 1882, we ask the same amounts as were appropriated for the past two years, based upon the following approximate estimate:

For general salaries	$10,000 00
For provisions	10,500 00
For clothing and shoes	3,500 00
For ordinary repairs	3,000 00
For teachers' salaries	2,950 00
For miscellaneous expenses	2,500 00
For fuel	2,000 00
For lights	1,200 00
For expenses of farm and barn	1,200 00
For painting	600 00
For per diem and expenses of board	500 00
For furniture	500 00
For bedding	500 00
For discharged inmates	400 00
For books and stationery for school rooms	300 00
For hospital expenses	300 00
For current literature and books for library	250 00
For farming implements	150 00
For repairs of wagons, harness, etc.	150 00
	$40,500 00
Less estimated receipts for earnings of institution	5,000 00
Total	$35,500 00

We desire to call attention to the condition of the main building. It was poorly built and is in a generally dilapidated condition, and it is questionable whether any large amount should be expended upon it for repairs. During the past year the settling of the foundation walls and spreading of the main walls of the building caused so much apprehension that the board secured the services of competent building experts to examine their condition and recommend what course should be pursued. In accordance with their suggestions the walls were thoroughly anchored to prevent further spreading, and embankments

made around the foundations to protect them from damage by water and frost. We trust the legislature will examine the building for themselves and decide as to what amount of further repairing would be justifiable.

We would briefly recapitulate as follows our wants, for which the legislature of 1881 are asked to make provision:

CURRENT EXPENSES.

For each of the years 1881 and 1882	$35,500 00

SPECIAL.

For new chapel	$10,000 00
New roof for main building	2,500 00
Winter hall	1,500 00
New barn	1,250 00
Filling up swamp	1,500 00
Total	$16,750 00

We cannot close our report without a few words in recognition of the valuable services of our superintendent. Coming to us a few years ago under great disadvantages, and then taking charge of an institution which had always been regarded as a prison, or house of correction, he has removed from it all that was calculated to do violence to the boy nature, and thereby greatly increased its power to do good to those who are sent here for reformation. He has assiduously and conscientiously performed every duty of his position in a most satisfactory and successful manner, and we trust we may be able for a long time to retain his valuable services.

We have the honor to remain your obedient servants,

D. B. HALE,
E. H. DAVIS,
G. A. SMITH,
Board of Control.

LANSING, September 30, 1880.

REPORT OF THE TREASURER.

TREASURER DEBIT.

1879.		
Oct 1.	To cash in bank as per report	$9,732 06
	" received from State treasurer account of current expenses during fiscal year	35,500 00
	cash received from State treasurer account furnishing new cottage	1,000 00
	cash received at institution—	
	for shop work	11,248 15
	" visitors' entrance fees	425 40
	" sale of farm stock, milk, etc	306 25
	" " old iron (building fund)	203 21
	" miscellaneous	443 44
		$58,860 53

TREASURER CREDIT.

1879.	Voucher.		
Oct. 31.	No. 1, Current expenses	$3,895 65	
31.	" 2, Special	1,354 65	
Nov. 29.	" 3, Current expenses	4,486 41	
29.	" 4, Special	698 06	
Dec. 31.	" 5, Current expenses	3,033 31	
31.	" 6, Special	720 52	
1880.			
Jan. 31.	" 7, Current expenses	3,337 11	
31.	" 8, Special	972 12	
Feb. 28.	" 9, Current expenses	2,759 05	
28.	" 10, Special	638 84	
Mar. 31.	" 11, Current expenses	4,477 09	
31.	" 12, Special	206 76	
April 30.	" 13, Current expenses	3,447 16	
30.	" 14, Special	300 68	
May 31.	" 15, Current expenses	3,083 51	
31.	" 16, Special	141 45	
June 30.	" 17, Current expenses	3,819 94	
30.	" 18, Special	155 84	
July 31.	" 19, Current expenses	5,037 88	
31.	" 20, Special	50 87	
Aug. 31.	" 21, Current expenses	3,628 93	
31.	" 22, Special	16 50	
Sept. 30.	" 23, Current expenses	4,322 58	
30.	" 24, Special	354 00	
	By balance in bank	7,921 61	
			$58,860 52

ABSTRACT OF EXPENSES FOR FISCAL YEAR ENDING SEPTEMBER 30, 1880.

Inventory—increase in amount	$9,011 30
Machinery, etc.—depreciation in value	65 00
Bedding—depreciation in value	443 33
Fuel—amount consumed	1,335 61
Lights—amount consumed	1,117 66
Provisions—amount consumed	9,509 25
Clothing and shoes—amount consumed	3,214 76
School expenses—amount expended	300 84
Hospital—amount expended	282 65
Postage—amount expended	152 85
Fugitives—amount expended	145 92
Repairs and alterations—amount expended	3,029 60
Printing, stationery, etc.—amount expended	65 75
General salaries—amount expended	10,006 66
School salaries—amount expended	2,345 87
General expenses—amount expended	2,161 23
Farm and barn—amount expended	1,184 18
Discharged inmates—amount expended	351 45
	$45,723 91

Contra.

Buildings—increased value as per inventory	$3,942 30	
Farm stock—increased value as per inventory	349 25	
Steam heating and cooking apparatus—increased value as per inventory	300 00	
Farming implements—increased value as per inventory	85 00	
School furniture—increased value as per inventory	40 00	
Library—increased value as per inventory	161 51	
Furniture—increased value as per inventory	762 02	
Chair work—excess of receipts over payments	6,509 87	
Interest—received during year	245 18	
Visitors—received during year	425 40	
		$12,820 53
Net current expenses for fiscal year		$32,903 38

LEDGER BALANCES.

Lansing, Mich., Sept. 30, 1880.

ACCOUNT.	DR.	CR.
Inventory	.....	$264,543 15
Cash	$7,921 61	.....
Land	25,000 00	.....
Buildings	189,225 00	.....
Machinery	1,192 00	.....
Steam heating and cooking apparatus	7,300 00	.....
Farming implements	1,166 60	.....
Chair stock	1,110 20	.....
Bedding	3,360 50	.....
Fuel	1,840 00	.....
School furniture	520 00	.....
School expenses	500 00	.....
Library	3,823 00	.....
James I. Mead	30 00	.....
Currrent expenses	.....	6,815 55
Hospital	31 00	.....
Postage	64 80	.....
Provisions	1,836 55	.....
Bills receivable	5,207 47	.....
General expenses	62 80	.....
Farm and barn	1,120 00	.....
Clothing and shoes	9,678 00	.....
Furniture	7,194 83	.....
Farm stock (horses, cattle, etc.)	4,216 00	.....
St. Johns Chair Co.	64 40	.....
School desks	.....	255 00
Concrete pavement	.....	144 60
New harness	.....	38 02
Tile drain south farm	.....	121 11
Furnishing new cottage	.....	242 53
Two chain pumps	.....	4 80
Farm horses	.....	300 00
	$265,263 91	$265,263 91

By the foregoing tables it will be observed that the net total current expenses for the fiscal year just closed amount to $32,903.38. The average number of boys in the institution during the year being 311 1-6, the expense *per capita* was therefore $105.74. Deducting from our expenditures the sum of $3,029.60, the amount expended for repairs and alterations, would leave the proper expenses of the boys for all other purposes, including the salaries of officers, teachers, overseers, and all other persons employed, and all other incidental expenses of the institution, $29,873.78, or a *per capita* cost of $96, of which $33.79 was for provisions, $10.33 for clothing and shoes, $8.51 for school expenses, including salaries of teachers and books and stationery for school-room uses; ninety cents for hospital expenses, including physician's salary and medicines; and $42.47 for all other expenses of the institution.

I think I shall be warranted in saying that there is not in the United States a similar institution where the cost of maintenance has been as low as is shown by this exhibit, and while nothing has been left undone or unfurnished which was necessary for the proper care and advancement of our inmates, we have scrupulously avoided incurring any unnecessary expense.

E. H. DAVIS, *Treasurer.*

Lansing, September 30, 1880.

SUPERINTENDENT'S REPORT.

To the Honorable Board of Control of the Michigan State Reform School:

GENTLEMEN,—Another year in the history of our institution having closed, I again have the pleasure to submit the annual report required by law, showing what progress we have made, and the present condition of the institution as compared with previous years. The usual statistical tables which are completed to this date are herewith submitted:

TABLE I.

Number of Children Admitted since the opening of the Institution, Sept. 2, 1856, Number in the School at the date of the last Report, Number Admitted and Released during the year, and the present number in the School.

	No. Committed since Opening.	No. as reported in School Sept. 30, 1879.	No. Admitted during Year.	No. Released during Year.	Present No. in School.
White boys	2,134	275	162	154	283
Colored boys	166	30	14	13	31
Girls	8				
Indians	4	2	1	1	2
Totals	2,312	307	177	168	316

TABLE II.

The Counties from whence the Boys were received.

Counties.	Past Year.	Previous Years.	Total.	Counties.	Past Year.	Previous Years.	Total.
Alcona		1	1	Lapeer	1	17	18
Allegan	2	23	25	Livingston	1	18	19
Alpena	2	4	6	Manistee		3	3
Antrim		3	3	Mason		7	7
Bay	15	42	57	Menominee		2	2
Branch	5	59	64	Midland	2	4	6
Berrien	3	35	38	Monroe		27	27
Barry	2	13	15	Macomb	1	23	24
Benzie		3	3	Montcalm	1	12	13
Cheboygan		2	2	Marquette	4	10	14
Calhoun	9	92	101	Muskegon	3	20	23
Cass	1	22	23	Mecosta	3	10	13
Clinton	3	26	29	Newaygo	2	7	9
Delta		1	1	Oakland	5	71	76
Eaton	5	46	51	Oceana		3	3
Emmet		2	2	Ottawa	2	37	39
Gratiot		11	11	Ontonagon		1	1
Genesee	5	71	76	Osceola		3	3
Hillsdale	7	36	43	St. Clair	3	45	48
Houghton		9	9	St. Joseph	2	40	42
Huron		1	1	Shiawassee	3	34	37
Ionia	2	38	40	Sanilac		9	9
Iosco		4	4	Saginaw	5	61	66
Ingham	9	81	90	Tuscola	1	3	4
Isabella	1	5	6	Van Buren	1	22	23
Jackson	3	115	118	Washtenaw	7	91	98
Kalamazoo	9	98	107	Wayne	32	536	568
Kent	8	95	103	Wexford		1	1
Keweenaw		1	1				
Lake	1		1				
Lenawee	6	95	101	Totals	177	2151	2328

TABLE III.

The Courts by which the Commitments were made.

Courts.	Past Year.	Previous Years.	Totals
Justices of the peace	126	1337	1463
Police justices	34	332	366
Circuit courts	15	331	346
Recorders' courts	2	114	116
Returned		40	40
Totals	177	2154	2331

TABLE IV.

The Cause of Commitments during the Year.

Crime.	No.	Crime.	No.
Grand larceny	7	Larceny	115
Burglary	10	Attempt to murder	1
Assault and battery	15	Vagrancy and disorderly	29
Total			177

TABLE V.

Nativity of the Boys received, and of their Parents.

Boys.	No.	Boys.	No.
Michigan	125	Missouri	18
New York	7	Ohio	3
Pennsylvania	1	Canada	1
Virginia	1	Germany	2
Indiana	5	Holland	5
Illinois	2	Ireland	1
Massachusetts	3	Unknown	5
Total			177

Parents.	No.	Parents.	No.
America	93	Holland	2
England	2	Colored (born in America)	14
Ireland	34	Canada	11
Germany	8	Unknown	13
Total			177

TABLE VI.

The Ages of the Boys Committed.

Ages.	No.	Ages.	No.
Ten years old	19	Fourteen years old	31
Eleven years old	28	Fifteen years old	22
Twelve years old	33	Sixteen years old	16
Thirteen years old	28		
Total			177

TABLE VII.

The Domestic Condition and Religious Training of the Boys previous to their Commitment, as given by themselves and the Officers bringing them.

Condition.	No.
Number who have lost their father	26
" " " " " mother	37
" " " " both parents	11
" " " been in jail one or more times	69
Catholic	44
Protestant	112
Unknown	21

TABLE VIII.

The Admission, Discharges, Number in the School at the end of each Month, and the average during the Year.

Months.	Admitted.	Discharged.	No. in School at close of Month.
October	18	4	321
November	8	23	306
December	8	12	302
January	20	10	312
February	10	12	310
March	20	15	315
April	13	19	309
May	18	11	316
June	13	19	310
July	19	18	311
August	10	15	306
September	20	10	316
Total	177	168	

TABLE IX.

Shows the Disposition of the Boys who have been Released.

DISPOSITION.	No.
Number discharged as reformed	13
" " to go out of State to reside with parents	1
" granted leave of absence for one year	1
" escaped	
" died	
" to live with farmers	
Total	1

TABLE X.

Employment of Boys.

EMPLOYMENT.	No.	EMPLOYMENT.	No.
Cane shop No. 1	120	Attending dormitories	
Cane shop No. 2	103	Hospital and Matron's department	1
Tailoring	18	Bath-room	1
Shoemaking	4	Family houses	1
Kitchen department	15	Farming	2
Washing and ironing	6	Employment in Superintendent's department	1
Engine room	2		
Attending school-rooms	4		
Total			31

TABLE XI.

Number of Officers and Employés in the School.

OFFICERS.	EMPLOYES.
Superintendent,	Farmer,
Assistant Superintendent,	Teamster,
Seven Teachers,	Cook and Laundress,
Two Matrons,	Dining-room Girl,
Assistant Matron,	Overseer of Washing Department,
Physician,	Six Overseers of Shops,
Watchman,	Engineer,
Baker,	Overseer of Dormitories.

TABLE XII.

Work Performed and Produce Raised by Boys.

TAILOR SHOP.	
Caps made for boys	362
Jackets made for boys	476
Pants made for boys	651
Overalls made for boys	325
Suspenders made for boys	620
Shirts made for boys	1,274
Mittens made for boys	50
Sheets made for boys	210
Pillow-slips made for boys	376
Bed-ticks made for boys	103
Towels made for boys	204
Aprons made for boys	81
Pieces repaired for boys	1,320
Curtains	100
SHOE SHOP.	
Shoes made for boys	358
Boots and shoes repaired	765
CHAIR SHOP.	
Chair-seats caned	54,487
Chair-backs caned	8,265

GARDEN AND FARM.	
Bushels of potatoes	600
" onions	200
" corn—ears	500
" beans	40
" oats	338
" raspberries	6
" tomatoes	75
" turnips	25
" rutabagas	1,000
" rhubarb	15
" cucumbers	20
" apples	1,000
" pears	15
" green corn	300
" peas	10
" beets	400
" carrots	300
Tons of hay	15
" corn stalks	75

It will be observed by reference to the foregoing tables that during the past year we have had in the institution all the boys for whom we are able to make provision; the accommodation for receiving and caring for inmates not having kept pace with the increase of boys sent to us; yet, owing to the increased usefulness of the institution in reforming and restoring boys after a much shorter average period of residence with us than was required under the old *régime*, we have been able to receive all who have been committed to our care, without being obliged to discharge others whose reformation was not fully assured, in order to make room for them. In regard to the present method of treating our inmates as compared with that adopted by my predecessors, and the results of each, I propose to treat at some length, commensurate with the importance of the subject, later in this report. The legislature most wisely enacted that the management of the institution should have discretionary power to discharge any boy before the expiration of his term, should it appear that the best interests of the boy as well as of society would be best served by such discharge. This fact being known to the boys, inspires them with hope for the future, and a disposition to so conduct themselves as to win the approval of their teachers and overseers, and through them that of the superintendent and board of control. It very rarely happens, however, that a boy leaves us who has not been with us a full year; as by the wise system of county agents which the State very properly adopted some years ago, it is to be presumed that no boy is sent to this institution who is not a proper subject for our care, and no matter how ambitious and desirous to reform the boy may be, a full year of trial is generally needed to attest the thoroughness and genuineness of his reform. It occasionally happens, however, that boys are sent here quite improperly, through the efforts of families or communities who desire to rid themselves of the burden of their support, in consequence of some mental or physical deformity rendering them incapable of sustaining

themselves. Such children are not infrequently left purposely exposed to temptation that they may perform the condition necessary to send them here. It seems to me that imbecile children and such others as are more properly subjects for asylums or cures, should be returned to the counties from which they came, and the county agents notified of the cause for such return.

I have the pleasure to report that the institution in every department is in as flourishing and satisfactory condition as at any period of its history.

The health of the inmates continues to be excellent to a wonderful degree. No death or case of severe or serious illness has occurred since our last annual report. The scrupulous cleanliness of every department, and the regular habits of all the inmates, added to our healthful location, good drainage and supply of excellent water, combine to produce this result.

My associates and the employés generally of the institution have during the past year been faithful in the discharge of their various duties, and have zealously coöperated with me in carrying forward the trust committed to us. The selection of men and women for the various departments, who are not only thoroughly competent to fulfill the duties for which they are appointed, but whose characters and dispositions fit them for the high trusts committed to them, and whose daily association with our boys shall tend to improve their character, and thus aid in the noble aim of our institution, is a matter the magnitude of which cannot be over-estimated. We have sometimes been unfortunate in the selection of teachers and overseers, ascertaining after a season of trial that although competent to perform satisfactorily the particular duties for which they were employed, their influence with the boys was of a debasing character, and that consequently the institution would be better off without them. It has been our unvarying rule not to retain any employé to whom the boys may not properly look for good counsels and a pattern of good behavior.

In consequence of the unprecedented amount of rainfall extending through the entire farming season, the results of our farm have not been satisfactory as to the yield of vegetables. For several years our root crops have been so ample that besides supplying fully the wants of the institution we have sometimes had a surplus to sell. This year, however, our own wants are barely supplied by the farm.

We employ one farmer to lay out and direct the work of the farm, all of which is done by our boys.

The benefits of the farm are two-fold. Besides yielding generally an abundant supply of excellent vegetables, sufficient for the wants of the institution, it furnishes healthful and improving labor for many of our boys, creating habits of industry and fitting thereby to support themselves in an honorable manner when they shall have left us.

The question of employment for the boys has been one that has occupied our attention for years past. We have desired to introduce in our institution some kind of labor suited to the tastes and capacities of our boys, whereby they would be able not only to contribute in a measure to their own support, but would be enabled upon going forth in the world to continue the work in their own behalf. The board of control, being fully impressed with the importance of this subject, authorized me about a year ago to visit a number of like institutions, where boys are employed, hoping thereby to be able satisfactorily to solve this problem. I accordingly spent several weeks in visiting and examining the principal reformatories of the country, but was unable to find any kind of manufacturing labor which I could confidently recommend to be introduced

into our institution. In some cases extensive and costly machinery was employed, which gave employment to the boys while under confinement, but would be of no practical use to them hereafter, and in other cases the products of the boys' labor found a local market which would be of no use to us in this State, and in a majority of these institutions the labor of the boys would command a higher price for the reason that they were committed for longer and definite terms, and consequently would become more expert in the work entrusted to them. The same rule prevails in a more noticeable degree in the penal institutions of Michigan. In the prison at Jackson, where prisoners are sent to serve long terms of imprisonment, a much higher price is obtained for labor than at the house of correction at Ionia, where the terms are much shorter. For several years past the caning of chairs has been the only employment which we could give our boys beyond the work required in the several departments of our own institution, such as tailoring, shoemaking, and the like, none of which latter can be profitably pursued on an extensive scale, or beyond filling our own requirements. Fortunately the demand for caning during the past year has been sufficient to keep our boys employed and has aided substantially in the support of the institution.

We continue the military drill, which was introduced by the present superintendent several years ago, with unabated confidence in its good results. Our boys have attained a proficiency in the manual of arms and in soldierly bearing which is highly gratifying, and which has called forth the highest enconiums from our State military officers. In a competitive exhibition on the 3d of July last, open to all the military companies of the State, our boys brought home the premium flag which had been offered for the best drilled company.

The advantages of this drill have been heretofore dwelt upon at considerable length, and at the present time a brief recapitulation will suffice. Besides giving the boys healthful exercise—and this drill is gladly accepted by them during the allotted hours for recreation—it imparts to them an erect posture and manly bearing, and that unquestioning yielding to discipline which is indispensable in the good soldier.

At the biennial session of the legislature in 1879 we asked for an appropriation for the purpose of erecting a chapel on our grounds. We ardently hoped that the legislature would see the necessity for this building, and have no hesitancy in making the needed appropriation. It was then urged that in consequence of the greatly increased appropriations asked for by other State institutions, the erection of a chapel should be deferred until "a more convenient season." That this appropriation should not longer be withheld we regard as of the utmost importance, The room now in use for a chapel in the main building was designed for that purpose when we had a much smaller number to provide for, and is now uncomfortably crowded. We need this room for other uses, and hope that the legislature of 1881 will see the propriety and necessity of providing immediately for a chapel to be erected upon our grounds, capable of providing for a largely increased number. Besides our own inmates, there are hundreds who make application every week for admission to our Sunday exercises whom we are obliged to send away, as we have not the room to accommodate them. We continue as heretofore to have Sunday-school in our chapel each Sunday morning, the boys being divided into classes and taught by our own teachers. Each Sunday afternoon we have religious service in our chapel, at which the resident clergy of the city and visiting clergymen alternately officiate.

During these Sunday exercises our boys behave with the utmost decorum, and

we believe that the good seed there sown will bear abundant fruit in the harvest.

Nearly every Sunday forenoon many of our boys, sometimes attended by their teachers and frequently unattended, visit the various churches in the city, always promptly returning to the institution at the close of services.

The main building being an old, dilapidated and badly contrived and constructed affair, has required many repairs during the past year, and will probably continue to be the source of continual outlay to render it habitable. Some months ago we became considerably alarmed in consequence of the spreading of the walls, and fearing disastrous results, procured the services of some of the best building experts in the State, by whose advice we have anchored the walls and so protected the foundations that we hope we are secure against immediate danger.

Our new cottage building, for the erection of which provision was made by the legislature of 1879, has been fully completed since our last report and has been occupied for several months past. It meets a long felt want, as our old buildings were very much crowded, and are now greatly relieved by the transfer of fifty boys to the school rooms and dormitories provided in this cottage.

We have just completed, at a cost of a little less than five hundred dollars, a beautiful porch at the principal entrance to our main building in place of the steep and dangerous stairway which formerly led to it, and which has always been dreaded by persons visiting our institution. The new porch adds greatly to the comfort as well as the general appearance of our building, and we believe that no one, upon comparing the old with the new, will question the wisdom of the expenditure.

We greatly need a winter hall for the boys; a building, plain and inexpensive, to which our inmates may resort for exercise and recreation during the winter months and in seasons of inclement weather. We have now no suitable place which may be used for this purpose. It is just as necessary to the proper development of the boy that he should enjoy the pastimes and recreation suited to his age as that he should eat or perform any other function for which nature has prepared him. I have carefully estimated the cost of a hall suited to our wants, and find it can be built and completed at an expense of from $1,200 to $1,500.

During the year just closed we have received visits from a number of officers and other representatives of many of the reformatories for youth of the leading States and from some foreign countries. In every case these visitors have been highly pleased with our manner of conducting the Michigan Reform School and its results. I know of no similar institution where the transformation from a prison to a happy Christian home has been so thorough and complete as with us. In many cases "Trust Houses" are adopted, to which boys are admitted, who, after a season of a year's trial under grates and bars are considered as worthy of admission to them. The present system of holding boys solely by a reliance upon their honor was proposed by the present superintendent and consented to—not without some misgivings as to its success—by the board of control, who determined, however, to try the experiment, which has resulted in a triumphant success.

We meet almost daily intelligent persons who are quite skeptical as to the propriety or success of our method of treating our inmates. To such we refer to our past success and explain why we are confident of as great success in the future.

The prison principle is hateful to the adult delinquent, to the youthful

offender it is abhorrent. The prison principle in reform peculiarly outrages the nature of child life. The shock penetrates his being, and body and soul rise up against it in fiercest antagonism, for as soon as born the great law is upon the child that he spring toward the development of manhood. To this end his Creator has endowed him with the intensest activity and restlessness. The child loves and pants for freedom. To the boy the bolted door, the barred window, the walled yard and other contrivances of brute force are enemies that he will resist with all the force of his nature, though he is apparently rendered helpless against them. I believe that these barriers against the cravings of his child nature, instead of tending to his reform, have rather the contrary effect, and will hastily develop any criminal germs which may exist in his nature. The question does not naturally occur to the child "How shall I reform through these agencies?" but rather, "How may I escape from them?" and to the solution of this question his best energies are devoted. It must be especially borne in mind that those who are sent to our institution for the benefit of its discipline are not the hardened criminals of the land, against whom we nightly turn the bolts of our dwellings, and whose visitations we dread as we lie awake in the dead hour of the night—but children of the ages of those who, with more fortunate surroundings, are deemed of too tender age to leave home, and desired by their cheerful presence, to make home happy. It frequently causes expressions of surprise to see children of such tender age and innocent appearance brought to our institution; and the question "What could he have done?" is asked very often. And yet it is of common occurrence for a powerful officer to present himself at our office, having in his custody a frail lad who has scarcely seen ten summers, bound with hand-cuffs to prevent him from escaping from or making an assault upon his brave custodian. These lads upon entering the reform school are generally surprised by being addressed in tones of kindness. It is something to which they have hitherto been unaccustomed. They are mostly children of want, either orphans or worse,—children of inebriate parents, accustomed to kicks and cuffs and to hearing profane and abusive epithets. Is it strange that reared under such circumstances, children should start in the pathway of crime? No other road appears to them. We receive them at our institution, sometimes fearing to ask their age, though the magistrate has certified it to be over ten years—knowing that we can do them good, fully assured that kind treatment and a reliance upon their native honor—which even the rough usage to which they have been accustomed has not fully extinguished—will develop in due time the germs of a better life which have, of necessity, lain dormant within them.

The Michigan State Reform School has the honor of having taken the foremost position in the complete transition from a prison to its present condition. In no other institution of the kind has the change been so complete, and we are daily assured by managers of kindred institutions and others who have interested themselves in reformatory work that they have not elsewhere seen such gratifying success as has crowned our labors, and we feel that the best proof that can be furnished of this fact is from the boys themselves. Those who have left the institution during the past year have furnished most unmistakable assurance of the continuation of the good work commenced in them, while those who still remain under our care are doing as well as the most enthusiastic friend of the reform school could desire.

We have continued to receive during the past year through the courtesy of the publishers, the following welcome publications:

Lansing Republican, Hart Argus, Milford Times, Deaf Mute Mirror, Sag-

naw Daily Morning Herald, Ingham County News, Christian Cynosure, Grange Visitor, Wolverine Citizen, Coldwater Republican, Leslie Local, Ann Arbor Courier, Benzie County Journal, Pentwater News, Grand Rapids Saturday Evening Post, Northern Tribune, Rockford Weekly Register, Owosso Press, Flint Globe, Alpena County Pioneer, Grand Haven Herald, Bay City Tribune, Battle Creek Journal, Kalamazoo Telegraph.

I cannot close this report without sincerely thanking the members of the Board of Control for the kind consideration of which I have been the constant recipient, and their hearty coöperation with me in making and continuing the Reform School what it now is.

Recognizing the providential care of our Heavenly Father in all the work of the past, and trusting that in the future He will guide and direct our course, and continue to increase our usefulness,

I have the honor to subscribe myself,

Your obedient servant.

FRANK M. HOWE,

LANSING, Sept. 30, 1880. *Superintendent.*

PHYSICIAN'S REPORT.

To the Honorable Board of Control of the State Reform School:

GENTLEMEN:—Herewith I hand you the report of the hospital department of the Reform School for the year terminating this date.

The amount of sickness has been very small. There have been no prevailing diseases in the institution during the year. I have no deaths to report, the last one having occurred May 27th, 1879. There is no question but the excellent health of the inmates is due to the extreme cleanliness and good ventilation of the institution.

There is only one thing in regard to the sanitary condition I would call your attention to, and that is the stagnant water or swamp on the east side of the buildings. It is liable to produce sickness at any time. With this exception the surroundings are complete.

As in former reports, I acknowledge the coöperation of the Superintendent and Matrons in maintaining the health of the inmates.

Respectfully submitted.

J. W. HAGADORN,

LANSING, Sept. 30, 1880. *Physician.*

TEACHERS' REPORT.

To the Honorable Board of Control of the Michigan Reform School:

GENTLEMEN:—Allow us to present the annual report of the school department of this institution for the year ending September 30, 1880:

Number of boys in school at the beginning of the year	307
" received during the year	177
Whole number under instruction during the year	484
Number dismissed during the year	168
Number now in school	316

The scholarship of boys received during the year is shown by the following tables:

Number who did not know the alphabet	3
" read in primer	0
" " first reader	20
" " second reader	40
" " third reader	52
" " fourth reader	41
" " fifth reader	21
Total	177

ARITHMETIC.

Who knew nothing of arithmetic	77
" had studied primary arithmetic	29
" " rudiments of arithmetic	56
" " practical arithmetic	15
Total	177

WRITING.

Who could not write	70
" form words	71
" write legibly	35
" " well	1
Total	177

GEOGRAPHY.

Who knew nothing of geography	154
" had studied primary geography	0
" " intermediate geography	15
" " common school geography	8
Total	177

The standing of boys dismissed is shown by the following tables:

READING.

Who could not read	2
" were in first reader	1
" " second reader	2
" " third reader	6
" " fourth reader	24
" " fifth reader	71
" " sixth reader	62
Total	168

WRITING.

Who could not write	5
" " form words	6
" " write legibly	135
" " " well	22
Total	168

ARITHMETIC.

Number who did not study arithmetic	5
" studied primary arithmetic	0
" " rudiments of arithmetic	49
" " practical arithmetic	144
Total	168

Of those studying practical arithmetic there were—

In fractions	3
In compound numbers	40
In percentage	36
In proportion	20
Completed the book	15
Total	114

Of those studying the rudiments of arithmetic there were—

In multiplication	4
In division	11
In fractions	23
In compound numbers	8
In percentage	3
Total	49

GEOGRAPHY.

Who did not study geography	29
" studied Harper's introductory geography	43
" " Harper's school geography	96
Total	168

The boys are distributed in the several departments of the school as follows:

In the first or most advanced division	55
" second division	49
" third division	38
" fourth division	40
" fifth division	41
" sixth division	47
" seventh division	46
Total	316

The following table shows the standing of boys now in school:

READING.

Who read in primer	10
" " first reader	2
" " second reader	27
" " third reader	41
" " fourth reader	110
" " fifth reader	87
" " sixth reader	39
Total	316

WRITING.

Who can not write	31
" " form words	64
" " write legibly	188
" " " well	33
Total	316

ARITHMETIC.

Who do not study arithmetic	17
" study primary arithmetic	23
" " rudiments of arithmetic	189
" " practical arithmetic	73
Completed practical arithmetic	14
Total	316

GEOGRAPHY.

Who do not study geography	117
" study Harper's introductory geography	133
" " Harper's school geography	66
Total	316

The work in this department has been attended with the usual success. The advancement, though less than we had hoped, is all we could reasonably expect. A majority of the boys received during the year have been very ignorant; habits of order and study have been no part of their previous condition; many, though quite advanced in years, read in the first and second reader, hence the real extent of the work cannot be shown by their standing in books.

That the greatest good may be secured to the boys in the short time they remain in the institution, they are instructed in that part of education that helps most in the common business of life. As indicated by the tables the studies of the common school are being pursued with a measure of success. Quite a number have completed the practical arithmetic, and have a knowledge of the other branches that is correspondingly good.

The quiet manner in which the work has been done, together with the general good feeling which prevails, shows the year to be one of profit to the boys and encouragement to us.

The opening of the school connected with the new cottage has lessened the number in crowded rooms of the main building and made it more comfortable and healthy for all. For the prompt manner in which the department has been supplied with books and other necessary materials, rooms repaired and kept in order, we are pleased to acknowledge the support of the superintendent.

Trusting that our efforts may continue to succeed the best interest of this department, we very respectfully submit the report.

A. C. THOMPSON.
A. A. REID.

STATE PUBLIC SCHOOL FOR DEPENDENT CHILDREN.

REPORT OF THE BOARD OF CONTROL.

Hon. C. A. GOWER,
Superintendent of Public Instruction:

SIR,—The board of control of the State public school hereby respectfully presents you with the seventh annual report of that institution; being for the two fiscal years closing respectively September 30, 1879, and September 30, 1880, including the reports of the treasurer of this board,* the superintendent, and physician. Reference being made to those reports, special attention is asked to the same in regard to the financial and sanitary condition of the institution, and to its general operations during the last two years.

The general management of the institution by the superintendent and his assistants, and the results obtained have been very satisfactory to this board.

This board cannot here refrain from expressing the gratification it receives from the continued approval this institution receives from our own people and from intelligent men and women of other States and countries.

The "Michigan system" for the prevention of pauperism and crime by the care and education of dependent children by the State, is quite familiar to-day with those who have to do with this kind of work in our sister States, and in England, France, Italy, Sweden, Poland, etc. This is shown by letters, papers and documents frequently received, which evidence proves that at home and abroad our system continues to receive careful consideration, and will no doubt impress to some extent its unique character upon other institutions for children. When the venerable statesman of France, M. Drouin De Lhuys of the French institute says: "Gentlemen, the State of Michigan, which is only about forty years old, has the merit of being in advance of ancient Europe in the inauguration of a new era for dependent children;" when many of the thinking social scientists here and abroad commend our system for the care and education of the children of the poor, our people may well feel gratified by the compliment from these sources and these words of encouragement.

But however agreeable this commendation may be, this board is still better pleased with the appreciation shown throughout this State by our agents of the State board of corrections and charities, by judges of probate, by supervisors and superintendents of the poor—all these being officers whose official duties bring them into direct contact and acquaintance with the dependent classes. Their daily experience and observations have made them familiar with the

* The treasurer's report is not inserted in this report.—SUP'T OF PUBLIC INSTRUCTION.

condition of the dependent children in the counties, in the county poor-houses, on the streets or in sadly broken homes, and also by visiting afterward this school and watching the effect upon the children they have brought here. They know and appreciate the benefit this institution has for the child, how it prepares it for a home, and how the after supervision and guardianship molds, improves, and elevates. From these practical, intelligent men, who are seldom accused of extravagant notions, but who are always known to be prudent and conservative, do we receive our greatest encouragement to persevere in the work of elevating to a better life, and to save from dependency and probable crime the children of the poor.

Appropriations by the Legislature of 1879.

The joint committee of the Legislature of 1879 visited the school and made a thorough examination of the system and methods here in use. This board was present and presented the needs of the institution and explained its work.

This committee unanimously recommended the following appropriations to the Legislature which were made as recommended:

Current expenses for 1879 and 1880—for each year	$36,000 00
Furniture	600 00
Repairs of buildings, steam and water-works	2,000 00
Rear additions to the five old cottages	2,500 00
New kitchen and changing old kitchen to employés' dining room	1,500 00
Fencing, side-walks, trees, grading, cement floors	800 00
Books for the children	200 00
Additional hydrants, pipe connections, steam pump, etc.	1,000 00
Covering steam pipes	800 00
For the completion of sewerage and the purchase of land	6,000 00

These appropriations were necessary, judicious and liberal. The special appropriations furnished the means to put everything in a better working condition.

The Construction Work—Act of 1879.

With the appropriations, and not exceeding any of them, the construction work has been completed in a permanent and satisfactory manner. The two-story rear additions to the five old cottages improve the appearance of the buildings and furnish needed store rooms below and increased dormitory room above. The new kitchen adds very much to the convenience and better working of that department. The main steam pipes have been covered with the Wickoff wood pipe, which secures a material saving of heat. The water mains have been extended about 300 feet and two hydrants added; a new well has been made and a new force pump put in. The well-house, which draws the water from the well forcing it into the water tower or through the mains like the Holly system, has greatly improved the facilities for putting out fires.

In general, the special appropriations of 1879 have been carefully expended for the purposes provided in the act to the extent as shown by the treasurer's report.

The New Sewer.

The institution buildings are located about one and three-fourths miles east of Coldwater river, and about one and one-fourth miles east of Mud creek, a branch of the river, which creek is the nearest stream. Up to 1879 no appro-

priation had been made to enable the board to provide adequate sewerage. As a temporary expedient a twelve-inch tile drain was extended from the buildings to a dry ravine, about 160 rods westerly and in the direction of the creek. The board assumed reluctantly the undesired responsibility of putting in this first sewer without an appropriation, but finally did so on the advice of the governor and the State board of health, and with the subsequent approval of the legislature. For some four years this sewer did good work. But, as expected, the coarse gravel bottom of the ravine became more and more impervious to water and there was danger after some four years' use that the standing water, only two or three rods across, however, might become an annoyance to owners of adjacent property. The board urgently recommended the completion of the sewer. At this juncture the joint committee of the legislature on the school visited the institution in the winter of 1879, and after a full examination recommended an appropriation of $6,000 for this purpose, and to purchase additional land. The whole matter of sewerage and land purchase was so closely connected it was deemed best by the committee and the legislature to submit the question as to which was the best system for disposing of the sewage and what land should be purchased, entirely to the discretion of the board. The legislature in this manner made the appropriation. Assuming the responsibility imposed, a thorough examination was made of the various methods for the disposal of sewage in use by cities and institutions in this country and abroad. There were found to be two prominent systems; one the water carriage through tile pipes, and the other the utilizing method, by which the sewage, by means of cisterns, pumps, pipes, hose, etc., is distributed over hillside farming lands. The board felt it to be its duty to fully examine this utilization of sewage and did so. The whole matter was several months under discussion. Two members of the board and the superintendent visited institutions in other States where the sewage was utilized. Between the advocates of these two systems there was found to be an uncompromising difference of opinion. The final conclusion, however, reached by the board was, that for this climate, and on account of the impervious clay soil of the higher ground of the farm where the institution buildings are, it would be a doubtful experiment to adopt the utilization system, and the disposal of the sewage upon the surface, it was thought, might endanger the health of the children. Hence it was decided to continue the tile drain to Mud creek. The right of way was procured and the title in fee to one acre on the creek. The engineering work was performed by Dr. J. H. Bennett, of Coldwater, and the sewer was put in in September and October last under him, and in direct charge of Mr. Wm. Chapoto, of Detroit. The average depth of the pipe below the surface is about five feet. The total fall from the institution to the creek is some over forty-five feet, and the least fall over any section of 100 feet is about six inches. The socket joint pipes are thoroughly laid in cement. Near the engine house a trap keeps back all sand from storm water or floating substances in the sewage. A wire network also keeps back anything that could obstruct the pipes. At the lower end a small [illegible] six feet square, which is kept locked, protects the outlet. The [illegible] building, is about two feet above the surface of the ground. The [illegible] feet rods from the creek and connected with by an open ditch. [illegible] from the pipe outlet is a small pond, [illegible] a large spring discharging at least [illegible] The [illegible] carries the water near the pipe outlet, and [illegible] a good current to the creek, [illegible] The creek is about two rods across and five feet

deep and flows through the large marsh bordering the river about half a mile with a slow current. The river is broad, deep, navigable for a small pleasure steamer, and no one lives near the banks for miles up or down by reason of the marshy shores. The mouth of the creek is about a mile west and a mile and a half north of the city and down stream from it. All the sewage of the institution passes down this sewer, including laundry water and that from the children's and employés' closets, kitchen, cottages, etc. The system is one of radical riddance. Some three hundred barrels of water from the laundry and buildings, aside from the storm water, pass through the sewer daily. The children's closets are constructed with a V shaped valley under them in which is about 12 inches of standing water. These are flushed into the sewer daily with fresh water from our large supply pipes. The sewer is trapped and ventilated by the most approved methods.

This sewer has now been in operation about one year and has worked satisfactorily in every respect. It is believed that the radical removal of all offensive sewage from the vicinity of the school materially contributes to the uniform excellent health of the children. Experience has also shown that nothing offensive has been or will be caused by the sewage at the outlet. This extended statement is made so that the legislature may know fully the care taken by this board and the success of its efforts in discharging this especial duty imposed upon it. The board expresses its gratification that results have so well demonstrated that the system adopted has been so efficient, and is of the opinion that however well adapted the irrigation system may be to some localities and climates, that for this institution the method now in use is the better one.

The total cost of the sewer extension, about 205 rods, including two ravine crossings, right of way, and one acre on the creek, was a little under $2,000. The tile was purchased of the lowest bidder on competition, and the work done by the day.

Of the appropriation for land and the sewer $1,200 has not been drawn from the State treasury, and the board will cover the same into the State treasury, for the reason that all has been accomplished that is necessary under the act of 1879, with the amount expended out of the appropriation.

Purchase of Land.

The title has been procured to twenty-six acres of very fine farming lands adjoining the former grounds of the school on the north, for $100 per acre. This being one-half the price that the State has had to pay for its other lands here, and the land being of the best quality, the cost is considered very reasonable. The price required for other adjoining lands has precluded any purchase beyound the one made. This gives the institution in a body seventy-two acres for grounds for the building, orchard, and farm. This does very well, though probably not as large a farm as there should be for twenty cows and other stock which ought to be kept. The new purchase makes an excellent addition to the farm, and will increase materially the comfort, convenience, and aid to supply the needs of the institution. Two acres of the higher ground have been set apart for a grove and cemetery at one end of the same on which some trees have already been set and a cemetery plat graded and used. A further addition of trees is needed, together with underdraining.

Appropriations for 1881 and 1882.

In the table here presented the board will only mention those items deemed

indispensable to the economical and successful administration of the institution and will afterward make some suggestions as to other items it would recommend as good policy to approve. Among the necessary items are named:

Current expenses for 1881 and 1882, each year	$36,000
Repairs of buildings, steam and water works and painting	2,000
Removal of the barns to the new farm grounds, enlarging one to provide stabling for cows, and to grade and underdrain the grounds about them	700
For the erection of a fuel house	600
For the purchase of cows, two horses, a double harness, and farm machinery	800
For fencing, trees and underdraining	500
For the library	300
For furniture, including bedding for main building and cottages	500
For a vegetable cellar and pig pen	500
For sidewalks about the buildings and replacing the old ones	400
Hydrants, iron pipe, hose and hose cart	1,000
Lime extractor, car scales, heater and pipe connection with cottages, cistern for engine house, rear iron doors, back of boilers, engine condenser	900

Believing it would be good policy for the legislature to do so, the board would respectfully recommend the following appropriations, and ask for them severally the careful consideration of that body, viz: The erection of gas works at a cost of not over $1,500. The erection of a wooden pavilion or one-story hospital in the place of the present one, that to be used for a children's cottage, at a cost of not over $3,500. This would include the heating, lighting and furnishing of the same, besides preparing the grounds for the building. The price now paid for gas is $3 per thousand, and the total cost is about $1,000 each year. It is belived that satisfactory gas can be made for not over $1.00 per thousand, and that the saving in two years would pay the cost of the outfit. The present hospital is so constructed, it will with very little change make as good a cottage as the others. It is of brick, two stories high, and larger and more expensive than necessary, as has been proved by the continued excellent sanitary condition of the children. A one-story wood building, not as large or expensive, would be much better adapted to this institution. This change would permit the reception of twenty-five to thirty more children from the counties. The hospital building here recommended would be in some respects similar to, but smaller than those on the university grounds at Ann Arbor.

The Indenturing and Supervising of the Children.

This is the most important work connected with this school. Even the education here of all the children and the work of preparing them for homes does not take precedence of the indenture and supervision work. This department, in order to secure the best results, must be put in the highest working order. Six years' experience has shown that the children can be placed in homes more rapidly than they are prepared for it. A large per cent of these children, the larger part, are suited morally and physically to enter good homes. But there are many whom street life, the county poor-house associations, and their own sad home surroundings have so affected mentally, morally, and physically, that they need months, and often a longer time, in this school under elevating, reformatory and restraining influences before they are prepared for a good

home or will be received into one. The average number now placed yearly in families is about one hundred. That is the net gain, and it is believed so far as the number placed out, it is satisfactory to the legislature. But the work of supervision cannot have too much attention and support.

There are now over 500 children placed in families in the various sections of the State. Under our laws and regulations no child is placed in a family except by the recommendation of the "Agent of the State Board of Corrections and Charities" in the county where the child lives. This officer can also cancel any indenture when the terms are not complied with by those having the child. These officers visit each indentured child at least once each year and report on its condition. Whenever, in the opinion of this agent, the welfare of the child requires it, the indenture of the child is canceled and the child is returned to this school. Sometimes it is found that the child is in fault, is incorrigible and needs special training here, after which another home is procured and tried. Sometimes those with whom the child lives will not send it to school or provide proper clothing as required. Sometimes the child is badly treated in other respects. These and many others are the causes calling for special supervision over these children. The duty of the State for the dependent child is not ended when placed in a home. By the law and regulations the guardianship of this board continues during minority, and until majority it is the duty of this board to keep watch and ward so as to secure the highest results with these children. In only about half of the counties are there "Agents of the State Board of Corrections and Charities." While this supervision by these agents is very valuable it can be only partial, and thus necessarily deficient in its operation. This system should be supplemented by the establishment of a "State Visiting Agency" for finding homes for these children, and supervising them after indenture. The board recommends an appropriation sufficient to keep such an agent in the field for about six months in the year, to visit these children in their homes, see that the indenture articles as to education and general treatment are faithfully executed, see if the child is adapted to the home, or if in another home it will not do better; and in general to labor prudently, intelligently and efficiently for the welfare of these children.

Each year increases the number of indentured children, and consequently the correspondence and other work in finding homes and supervising these children has already become immense, and the amount much beyond the ability of the officers of the school to possibly properly perform.

With an efficient working force in the institution and out among these children, there is no limit to the usefulness of this institution.

This board for several years has spoken earnestly of the necessity of the most thorough examination into the condition of the proposed home for any child, and then for the most thorough oversight of the child during its minority. All this must be done to secure a proper mental and moral training of the child, and prevent his relapse into dependency and probable delinquency. This work half-way done is useless, injurious and unprofitable. When it is well done the child is saved, society relieved of the support of the dependent and the results are on the side of both humanity and economy.

The board does not so much ask for such an agency for the purpose of finding a large number of homes, but to secure better ones, and more especially to aid this institution in securing the highest mental and moral results for its indentured children.

CURRENT EXPENSE STATEMENT FOR THE YEAR ENDING SEPT. 30, 1880.

DEBIT.		CREDIT.	
Inventory Oct. 1, 1879	$10,121 75	Inventory Oct. 1, 1880	$9,835 [illegible]
Bills payable Oct. 1, 1880	124 95	Paying last year's bills	617 [illegible]
Amount expended	35,173 22	Net current expenses	34,966 [illegible]
	$45,419 92		$45,419 [illegible]

* * * * * * * * * *

TABLE II.

Number of Children Received, Indentured, etc., last year.

Number received	18[illegible]
" indentured	21[illegible]
" returned to counties whence they came	[illegible]
" absconded	[illegible]
" died	[illegible]

TABLE III.

Number Received, Indentured, etc., since the School Opened.

Whole number received			944	
"	"	indentured		8[illegible]
"	"	returned to counties		[illegible]
"	"	sent to Reform School		[illegible]
"	"	absconded		[illegible]
"	"	died		[illegible]
"	"	remaining in school September 30, 1880		[illegible]
			944	94[illegible]

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TABLE V.

Sex, Parentage, etc., of Children Received During the Past Year.

Males	11[illegible]
Females	[illegible]
Whites	15[illegible]
Colored	[illegible]
Native parentage	[illegible]
Foreign parentage	[illegible]
Unknown parentage	[illegible]
Orphans	[illegible]
Half-orphans	[illegible]
Whose parents are both living	[illegible]
Who came from poor-house	[illegible]
Whose parents were convicted of crime	[illegible]
Whose parents were intemperate	[illegible]

TABLE VI.

Present Standing of the School.

Number reading in Chart	54
" reading in First Reader	81
" reading in Second Reader	37
" reading in Third Reader	46
" reading in Fourth Reader	40
" able to write letters	70
" able to add practical examples	113
" able to subtract practical examples	106
" able to multiply practical examples	72
" who know the Multiplication Table	65
" who are studying Outlines of Geography	66
" who are studying Colton's Grammar School Geography	40
" who are studying Hager's Primary Arithmetic	66
" who are studying Hager's Elementary Arithmetic	40
" who are studying Swinton's Language Lessons	20

TABLE VII.

Present Age of School.

Number between 2 and 3	1
" " 3 and 4	6
" " 4 and 5	9
" " 5 and 6	15
" " 6 and 7	26
" " 7 and 8	26
" " 8 and 9	49
" " 9 and 10	35
" " 10 and 11	46
" " 11 and 12	36
" " 12 and 13	24
" " 13 and 14	12
" " 14 and 15	6
" " 15 and 16	1
Total	292

Average age in years, 8.8.

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TABLE X.

Productions of Labor in Various Departments.

FARM.

Doz. Early Onions	132	Bushels Early Peaches	15
" Summer Radishes	275	" Bartlett Pears	1
" Early Beets	257	" Early Turnips	27
" Sweet Corn	701	" Late Turnips	155
Quarts Currants	202	" Beans	40
" Gooseberries	206	" Sweet Corn (ears)	80
" Strawberries	159	" Field Corn (ears)	895
" Blackberries	15	" Potatoes	449
" Raspberries	62	" Apples (winter)	871
" Cherries	38	Pounds Asparagus	179
" Peas	90	" Pork	6,545
" Early Beans	386	Number Heads Summer Cabbage	200
Bushels Late Onions	50	" Heads Winter Cabbage	1,163
" Winter Radishes	35	" Summer Squashes	140
" Lettuce	10½	" Winter Squashes	120
" Late Beets	40	Tons Corn Fodder	8
" Carrots	35	Bunches Celery	338
" Cucumbers	20	Tons Hay	25
" Tomatoes	50	" Oat Straw	13
" Oats	478	Quarts Milk	6,565

SEWING ROOM.

Dresses	108	Spreads	12
Aprons	395	Table Cloths	13
Shirts	108	Pants	1
Drawers	230	Pillow Slips	296
Sheets	216	Blouses	6
Napkins	77	Bed Ticks	2
Towels	371	Night Gowns	138
Handkerchiefs	630	Suspenders	192
Waists	193	Pillows	4
Mattresses	1	Chemise	121
Repellants	38	Erasers	51
Clothes Bags	9	Table Cloths	13
Night Caps	50	Dining-room Aprons	43
Bibs	10	Window Curtains	2

SHOE SHOP.

Prs. Boots made	10	Prs. Shoes repaired	2,396
Prs. Shoes made	487		

KNITTING ROOM.

Prs. Socks knit	177	Prs. Mittens knit	115

BAKERY.

Loaves of Bread	61,218

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TABLE XII.

Number of Officers and Employes, and Salaries.

Grade.	Salaries.	Grade.	Salaries.
Superintendent	$1,500	1 Asst. Engineer and Carpenter	$240
Asst. Supt. and Clerk	800	1 Baker	360
Matron	360	1 Foreman of Shoe Shop	450
6 Teachers, each	300	1 Night Watchman	300
4 Cottage Managers, each	240	1 Farmer	240
5 Cottage Managers, each	300	1 Asst. Farmer	96
2 Asst. Cottage Managers, each	168	1 Cook	216
1 Substitute Cottage Manager	300	1 Asst. Cook	144
1 Hospital Manager	240	2 Laundresses	192
2 Seamstresses, each	168	3 Supts. Dining Rooms, each	132
1 Seamstress	144	2 Domestics, each	132
1 Engineer	600	1 Nurse (temporary)	192

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HEALTH.

During the past year the health of the children has continued good with the exception of an epidemic of measles, which occurred last April, and lasted about three weeks. Of the 142 children and employés who had it, about 120 came down at the same time, having caught it from the same person. All recovered, and have suffered no permanent injuries in consequence. Last year only one death occurred out of a population of 480 children and employés who were connected with the institution, and during the previous year only one died out of a population of 460. Can a better health record be found anywhere among children of the age of ours? But while the general health of the school has been good, we have been greatly annoyed by a disease known as scalp ring-worm, which, though it does not affect the general health in any way, has added largely to our cares and expenses, and deranged our schools and general system of cottage classification. Particular attention is called to the report of Dr. D. C. Powers on this subject. I will only add that though it is pronounced by the most eminent dermatologists of this and other countries to be one of the most obstinate of all diseases to eradicate, we believe that we now have it under perfect control, as no new cases have appeared since last March, and that not long hence the few obstinate cases that now remain on our hands will be entirely cured. Very rigorous measures have been adopted to prevent the spread of the disease and its further introduction from the counties, from which it originally came. Since early in March, 12 children out of 107 who have been brought to the school for admission have been rejected because they were affected with a scalp disease. Probably about the same proportion of all the children sent here since the school opened have had scalp ring-worm, unknown to us and to those who sent them, as many cases can be detected only by clipping the hair very close and examining the head with a strong lens and the hairs with a microscope. Dr. Powers has been very faithful in his attendance upon the children and very thorough in his treatment.

I would say in this connection that there seems to be a necessity that some provision should be made for the maintenance of dependent children while under treatment at Ann Arbor. A bill for this purpose passed the last legislature, but failed to become a law. This institution sent three there last sum-

mer at its own expense, providing a nurse for them and paying their board and railroad expenses. Had such a provision been made two years ago it would have saved this institution great expense and trouble and been a great blessing to many diseased children throughout the State who are shut out from the privileges of this institution. As near as I can learn, there are about forty diseased children remaining in the county houses. I trust that this important subject will receive the favorable consideration of the next legislature.

SCHOOLS.

Few changes have been made in our schools during the past year. With one exception the same corps of teachers have been retained. All except the very youngest attend school four and one-half hours per day. The instruction given in the lowest rooms is largely oral, and by the aid of object lessons. Our teachers will compare favorably with those of former years, and with any in the city schools of this State. The children are younger than formerly, and remain here for a shorter time, few remaining more than one or two years, except the duller ones, and the schools do not, in consequence, keep up to as high a grade as formerly.

SUNDAY SERVICES.

Sunday services are maintained as in former years. All of the older boys who are able to walk to the city, attend church there in the morning. Catholic children are allowed to attend the Catholic church, and the other churches are visited in turn. Children not large enough to walk to the city—which class includes about three-fourths of the school—have a morning exercise in the chapel, conducted by one of the teachers, with such outside assistance as can be secured. At 3 o'clock in the afternoon a Sunday school is held, which is attended by the entire school, and, in conducting it, assistance is furnished from the city. Various clergymen occasionally visit the institution and address the children. The national series of lesson papers is used, and the lesson is thoroughly taught the children during the week preceding by the cottage managers. The hymns used are also taught the children in the day schools, and the necessity for purchasing a large number of singing books, which would soon be torn to pieces, is thus dispensed with. Their minds at the same time are stored with valuable truths, which, associated with the tunes, will never be forgotten. Evening religious exercises are also held in the cottages.

LABOR.

About two-thirds of the children are too small to labor very much, but all who can have something to do for about three hours each day. The only trade taught is shoe-making. During the past year the children have knit by hand all the mittens and woolen socks that have been used in the institution. A few children have been taught telegraphy by one of our own boys, who is now an accomplished operator, and has received from 35 to 40 words per minute. In this class is included several one-armed and lame children, who will become fitted, in time, to earn their own support. The telegraph line to the city continues in successful operation, and is a great convenience.

FARM.

The farm and garden have been unusually productive. Besides other things, 25 tons of hay, 480 bushels of oats, and about 1,000 bushels of apples have

been produced. Our corn crop is very fine, and yielded over 50 bushels per acre. At the county fair 19 premiums were taken on fruit, vegetables and swine, of which nine were first, seven were second, and three were third premiums. Last spring I bought a few hundred pounds of superphosphate with which I made a variety of experiments. Its use on corn showed the most marked effects. Five rows of corn containing 51 square rods, treated with a table-spoonful of the bone dust put in the hill when the corn was planted, yielded 1,360 pounds of ear corn, or at the rate of 60 bushels of shelled corn per acre, counting 72 pounds to the bushel. Five other rows planted by the side of these, *not* treated with the superphosphate yielded 1,130 pounds, or at the rate of 49¼ bushels per acre. There was a very marked difference all through the season in the growth of the corn, and that treated tasseled, silked and eared from a week to ten days earlier.

Dependence, Total or Partial.

The question has been often asked whether the dependence of the child on the public for support should be total or partial, to give it the right or make it liable to be sent to this institution. Also the question is often raised whether the child must come here through the poor-house. The reply to the latter question is, that nowhere in the law is there any intimation or requirement that the child must be first sent to the poor-house. It is better in all cases that the child should be sent directly here, and that, unless in some cases it is actually necessary that the child must be sent temporarily to the poor-house, no child should be sent there. In answer to the first question, the reply is given that partial as well as total support makes the child liable to be sent here. A case involving this question was recently disposed of in the circuit court in Houghton county before Judge William. A mother was receiving outside relief at the rate of eight dollars per month. The superintendents of the poor took the children and procured the usual order from the judge of probate which would admit them to this school. The matter was brought before the circuit court on a writ of *habeas corpus*, when Judge William decided that the action of the superintendents of the poor was legal. In his decision he says that: "Persons receiving continuous support from the county from month to month are liable to have their children of proper age sent to the State Public School, whether the relief granted was one dollar or twenty dollars per month, and that it was entirely within the jurisdiction of the superintendents of the poor to take proper measures for the removal of such children to said school." In 1874 the Attorney General in response to questions put to him by the Board of Control, filed his written opinion that the partial dependence of a child upon the public for support made him admissible to this school.

It would be well if superintendents of the poor acquainted parents receiving out-door relief with this decision of Judge William and the opinion of the Attorney General. It might lead to a more strenuous effort by those receiving temporary support to provide for their families without calling on those who disburse the funds of public charity.

Any proper method which will tend to confine the expenditures of the poor fund to the truly needy, and at the same time shall deal humanely with them, would be well to adopt.

Children Remaining in Poor-Houses.

We have received the past year 168 children, and there are probably fewer children to-day remaining in the poor-houses of this State than at any former

period since the school was opened. There are at this date 290 children, supported partly or in full by the public, reported from 40 counties, who are admissible to this school so far as age, health, etc., are concerned, only about 30 of which are in the poor-houses. The others are supported outside. If the counties which have not reported have about the same ratio of dependent children, there would be in the poor-houses of the entire State about 45 children admissible to this school, and from 400 to 500 outside the poor-houses who are receiving support partially or in full. There are besides these in the poor-houses, quite a number who are under three or over 12 years of age, too old or too young to be admitted, 49 feeble minded, besides not less than 40 diseased children. As winter approaches the number of dependent children will increase.

Placing out Children.

Since my last report, 216 children have been placed in homes, all in this State save three. The demand for our children has been greater than in any former year, particularly for girls. Only a few of the many applicants for the latter have been supplied, as, at one time, there were only thirty-two left in the institution, none of them being such children as were wanted. Eighty-eight children who have been placed in homes during the past and former years have been returned, making a total of 128, of whose support the public is relieved. Many of these have been indentured to relatives, who have come forward and assumed the care of their support. No traveling agents have been employed other than the regular county agents representing the State Board of Corrections and Charities. The county agency system is working, as a whole, more satisfactorily than in former years. The system of inspection and reporting is more complete, and past experience has taught some of the agents to be more careful in recommending applicants for children. It is to be presumed that further experience will make the workings of this system still more satisfactory. I have good reason to believe that the great majority of our children have fair average homes, while many of them are very well placed. Some are not as well situated as I could desire. It is an exceeding delicate and responsible work to select good homes for children, and with the best intentions, one may fail in judgment, so many thing are necessary to make a *good* home. I have not the least faith in the doctrine advocated by many that "*almost any home* is better than an institution for children." Many homes are better places for children than any institution can be, and some are much worse. I think that a larger percentage of our children would grow up into respectable manhood and womanhood if their residence here could be continued somewhat longer, and yet, while our room is so straitened, and the pressure for the admission of children to the school is so great, the greatest good to the largest number seems to demand that the children should be placed out as soon as respectable homes can be found for them, even though it might, in some things be better for many of the children to remain longer, in order to make room for those who are much more unfortunately situated. As far as is possible, the child is adapted to the home. Reports have been received from 282 children which show that the great majority of them are doing as well as could be expected, and are happy and contented until they arrive at the age of seventeen or eighteen years. They following is a summary of the reports that have been received:

Obedient, 224; fairly obedient, 37; disobedient, 15.

Industrious, 225; fairly industrious, 32; lazy, 19.

Contented, 250; tolerably contented, 7; discontented, 12.

Liked by guardian, 242; liked tolerably well, 20; disliked, 14.

In addition to the above, 18 have been reported as having left their guardians for various reasons, and their whereabouts is not known.

I have had a growing conviction, for some years past, that it would be better to shorten the time for which children are apprenticed, and to give them the privilege of selecting their own homes on arriving at the age of eighteen years. In order to secure the views of such of our agents as have had the longest experience in placing out and visiting children, I sent them recently a circular asking for an expression of their views on the propriety of making this change. All except two of those who replied express the opinion, very decidedly, that it would be better to bind out children not longer than until they have arrived at the age of eighteen years. I also wrote to the Rev. E. Wright, agent of the New York Juvenile Asylum, who has had the entire charge of placing out the children of that institution, in Illinois, for about twenty years, and the following is an extract from his reply:

"Our boys have always been apprenticed until twenty-one years of age, but I have found in an experience of many years that a large majority of them have not served out their full terms, and that employers have, in as large a proportion of instances, desired to be released from their obligation about the time their apprentices arrive at the age of eighteen years. On that account I have advised our Board of Directors to shorten the term of apprenticeship for boys, but they have taken no action on the subject as yet."

The reasons that may be advanced in favor of shortening the time of apprenticeship are briefly these:—

Young men and young women of any force are able to take care of themselves at this age, in a State where labor is as abundant as it is in ours, and where female help, particularly, is so scarce.

Girls at eighteen have arrived at a marriageable age.

Young people working for themselves, will, as a rule, provide better clothing for themselves than their guardians are willing to furnish, and can therefore appear more on an equality with the other young people of the neighborhood where they live. Their self-respect will thus be promoted.

At the above age young people will work more cheerfully, and have more ambition if they can have their freedom and be earning wages, even though the wages are quite small. For this reason many parents give their children their freedom at this age.

If children are unfortunately placed in poor homes, or homes that are not adapted to them, and where they are not happy and contented, it is much better that they should be allowed to choose for themselves. If, on the other hand, the home is a desirable one, they will remain in it longer and more happily if the privilege of choice is granted them, and they are not compelled to remain unless they choose to. Many feel that it is a species of slavery to be bound, and that they are disgraced by it, and young people in the same neighborhood would look upon them more favorably if they were not bound.

There is good reason to believe that, as a matter of fact, the indenture itself will hold very few to their places after arriving at the above age. Those who remain will remain because they prefer to, and not because they are bound. The "bonds of love" can alone hold them. It is better for the child that he should have permission to choose his home when eighteen years of age, and if he leaves his place, leave it with the approval of this institution, than that he

should run away, lose his self-respect, and be placed somewhat in the position of an outlaw, shunning this institution and regarding it as his oppressor. Without doubt, in many cases, after trying another home the child would return of his own accord to his first home and remain there contented.

Most of the education that an apprenticed child receives will be received before it has reached the above age, and the character, whatever it is, will be pretty well established then.

If the child has any natural talent for some other employment than that to which he has been apprenticed, it will not then be too late for him to change his career. A delay of three years more might prove fatal to a very useful life. Some of our children have no taste for farming or mechanical pursuits, but are very fond of study, and would succeed in some profession if allowed to educate themselves. This taste does not develop, perhaps, till the child has been in a home for some years.

Many people object to taking children because they must be held responsible for their care and support for so long a term of years, with so many uncertainties attending the physical, mental, and moral development of the child. Particularly is this true of conscientious, well-to-do people who expect faithfully to live up to their contract. They would prefer that the children should not be bound to them at all. This objection would be largely removed by shortening the term of apprenticeship three years.

These are a few of the reasons in favor of shortening the time of service. Many more could be given. I would add that some orphan asylums have abandoned entirely the the practice of binding out their children, as they regard the the contract of no practical value.

The system of indenturing children till they have attained their majority is borrowed from the English, where children do not mature at as early an age as here, and where it is harder to find profitable employment. But even then it does not work satisfactorily. In the Reformatory and Refuge Journal for September, published in London, this question is discussed by Mr. R. Gorsh, Superintendent of the Bolton and County of Lancashire Certified Industrial School. He says: "A question I should like to hear discussed is the wisdom of apprenticing boys at all. My own experience of it has not been at all satisfactory. I find that a very small percentage indeed of apprentices complete the term of their indentures creditably. Either the boy gets tired of his master, or the master gets tired of his boy, or the parents intervene, or encourage the lad to be awkward so as to bring about a mutual breach of agreement." My own experience is that the great majority of the children from this school remain contented until they have arrived at the age of sixteen, seventeen, or eighteen years, and that not many of them are contented after the latter period. This is owing often to the interference of friends or neighbors who tell the children that they are foolish to remain bound and working for nothing when they could earn high wages by leaving their places. Some of our best children have thus been induced to leave their home, and are now successfully supporting themselves and saving up some money besides. I recommend, therefore, that the law be so amended, if this is necessary to secure a change of system, that we can have the power to shorten the term of apprenticeship three years, and that children on arriving at the age of eighteen years shall be allowed to choose their own homes and make their own bargains with their employers, and that this institution shall be relieved of all further responsibility on their account.

Improvements.

With the appropriations granted by the last legislature, many improvements have been made that have added greatly to the health, comfort and convenience of the institution, a full report of which will be found elsewhere. The hay scales have already saved their cost, as we weigh all our coal as well as other things, and often find that our weights differ materially from those of the shipper. The covering of the steam pipes with the Wyckoff pump-logs will doubtless effect a large saving in fuel. The sewer has been extended to the creek and works successfully, and it is believed that no trouble in the future will arise from this source. The surface water, collected from a large part of our lawns and play grounds, flushes it after every heavy rain storm. The grounds have been greatly improved and are becoming quite attractive. Many trees have been planted and about 200 rods of fence have been constructed. The new kitchen, 20x28 feet, with basement, refrigerator, milk and meat rooms, is a perfect success and answers all our expectations, as do also the improvements made on the north side of the five cottages, first built, which were too small and had poor ventilation. A large amount of painting and calcimining has been done inside and outside.

Improvements Needed.

1. The floors of the children's dining room, shoe shop, and sewing room should be replaced at once with new ones of hard wood saturated with boiling hot linseed oil. The present floors are worn out or rotted. The side walls of the cottages, not painted last year, should be painted, and the ceilings calcimined. One of the barns, all of the blinds of the institution, the outside tin work, such as pipes, gutters and roofs, all the wood work of the school rooms, and many of the private rooms of employés will need to be repainted, as most of these things have not been touched since the institution opened, nearly seven years ago. The side walls of the dining room should also be painted. A large amount of calcimining of ceilings and side walls of rooms is also imperatively demanded, as they begin to have a shabby appearance.

2. The facilities for extinguishing fires, though fair now, should be considerably increased, as we carry no insurance, and are constantly exposed by the carelessness of so many little children, some of whom are quiet mischievous. Several fires have been already started which were fortunately discovered just in time to prevent a serious conflagration. A powerful force pump was placed over our new well last year, large enough to throw an inch stream 125 feet perpendicularly, or two three-fourths streams over our highest buildings. All that is now needed is more hose, a hose cart, two more hydrants and about 500 feet of four-inch cast iron pipe, to give us a very complete fire system. We need about 100 feet more of two and one-half inch cotton hose, and 300 feet of one and one-half inch rubber hose, to be attached permanently to the hydrants of the cottages. All of the larger boys and male employés of the institution are regularly drilled on the first Wednesday of each month, at three o'clock, P. M., in the use of the hose, hydrants, etc.

3. About 150 rods of board fence are needed to enclose properly the new purchase of land, and the new cemetery of two acres, which is now in an open field without any protection. Several hundred more trees should be planted in and around the cemetery and in places where trees have died out. Six or eight hundred feet of drain tile are needed to thoroughly underdrain the children's play ground and a portion of the front lawn, the soil of which is

THANKS.

This institution has been the recipient of many favors during the past year, and is indebted to the clergymen and various ladies and gentlemen of the city for help in the Sunday-school; to the Detroit Free Press, Hastings Banner, Lansing Republican, Coldwater Republican, Deaf Mute Mirror, Coldwater Reporter, and Weekly Press for copies of their papers; to the Hon. James Burns of Detroit for a half-barrel of French candies last Christmas; and to ex-Governor Bagley for $20.00 in cash last Christmas, and for $1,000 in the form of a bond of the city of Flint, drawing eight per cent interest, which is to be used, so long as this institution continues, for the purchase of Christmas pleasures for the children. This gift will be known as the Kitty Bagley fund, and is a monument to the memory of a dear child who died some years since.

CONCLUSION.

In concluding this report, I wish to say that at no former time have I felt more hopeful of this work than at present. From year to year our experience has suggested many changes and modifications of former plans, and many changes for the better will doubtless be made in the future, but the main scope and design of this institution I believe to be a grand and noble one, and still remains unchanged. It would be pleasant to say that *all* the children who come here were very nice and desirable, and that they turn out well; but such unfortunately is not the case. The law of heredity holds good here as elsewhere, and we find that, as a matter of fact, "the sins of the parents are visited upon the children." Some seem incorrigible under the best influences that can be brought to bear upon them here or in families. But the great majority of the children are sensibly affected and greatly improved by their environment, and will be lifted up into a much higher life than would have been possible had it not been for the aid of this institution. In many cases the natural character has been so far modified, or entirely changed, that it is difficult to realize that they are the same children that came to us. Time is necessary, however, to affect these permanent changes, and the children pass from us into homes so rapidly that the full effects of the training they receive here are not often seen. Many instances of great interest might be mentioned if this report were not already too long.

Respectfully yours,

LYMAN P. ALDEN,
Superintendent.

REPORT OF THE PHYSICIAN.

To the Board of Control of the State Public School:

GENTLEMEN,—The general health of the children of the institution during the past year, has been especially good. The small amount of general sickness and the continued freedom, year after year, from any form of malignant or zymotic affection attest the excellence of the sanitary regulations, as well as the general good management of the school.

Although the following table shows that a considerable proportion of the inmates have required some medical attention in the time, yet it may be stated

that the cases included in the first and second classes, embracing nearly two-thirds of the whole number were mostly of a slight and transient character, some requiring but a day or two of restricted diet, the others from one to three days of mild medicinal treatment.

The whole number admitted into the hospital during the year on account of sickness or injury, exclusive of those affected with measles or ringworm of the scalp, was 176, classified as follows:

Gastric or hepatic disorder	78	Intermittent fever	7
Common catarrhal cold	31	Remittent fever	3
Pneumonia	7	Erysipelas	2
Tonsilitis	4	Diarrhœa	5
Pharyngitis	5	Whooping cough	12
Croup	7	Tubercular meningitis	1
Conjunctivitis	5	Fracture of femur	1
Corneitis	1	Fracture of inner condyle of humerus	1
Ulceration of Cornea	2	Slight injury	4

The largest number admitted in any one month was in January..... 25
" smallest " " " " " April..... 5
The largest number under treatment at any one time, exclusive of those affected with contagious disease, was five.

There occurred one death in the year, that of the child four years of age, affected with tubercular meningitis. He was taken soon after admission into the institution and died the seventeenth day after admission into the hospital.

In the month of November a child was admitted into the institution, who in a few days was found to be affected with whooping-cough. He was at once isolated from the other children, but in the meantime he had communicated the disease to eleven others. These also were put into a ward by themselves, and there retained until they had recovered. By this means the further spread of the contagion was effectually prevented. On the last of March, a little girl, who had been sent to a home some months before, was returned, showing at the time some catarrhal symptoms supposed to be the result of cold. The third day after, the eruption of measles presented itself. On the first day after her re-admission she met the whole school in the dining room, and the result proved that she then and there communicated the disease to one hundred and twenty of the children. So large a number becoming affected at the same time, through all the cottages, no effort was made at isolation. The school sessions were discontinued for the time, and those affected were retained and treated in their respective cottages. Twenty-two others, a week to ten days later, had the disease, making in all one hundred and forty-two cases. Twelve had croupous symptoms. In five the disease was complicated with pneumonia. All recovered and with none were there any prolonged sequelæ.

For an undetermined length of time, possibly from the first gathering of children here from the various county-houses of the State, tinea tonsurans, or ring-worm of the scalp has prevailed to some extent among the inmates of the institution. Early in the present year it was found that the disease was decidedly on the increase; that notwithstanding numbers were being cured by the treatment then in use, their places were more than filled by accessions of new cases, derived partly from communication from child to child in the school, and partly from the admission of children from the different counties affected with the disease. In order, therefore, to succeed in its eradication from the institution, it became very evident that more radical and effective measures must be instituted: *First*, To arrest its farther spread by contagion; *Second*, To

avoid admitting any child having the disease from the counties, as well as *Third*, To cure those already on our hands.

The first was successfully accomplished by a more perfect and systematic isolation, and the daily use of protective application to the heads of the unaffected. The second was effected with equal success by cutting the hair short and carefully examining, by the aid of the lens and microscope, the head and suspected hairs of every child presented for admission, and rejecting all on whom any trace of the disease could be found. The third we have endeavored to accomplish by a most rigid and persevering course of general and local treatment, based upon and guided by the recommendation of the highest and most approved authorities. In this we have not been as rapidly successful as could have been desired, owing in part to the well known obstinancy of the disease, and in part to the difficulty in treating considerable numbers together, of having all the tedious and disagreeable details of the treatment—upon which success so largely depends—faithfully and unremittingly carried out by the attendants day after day and week after week until the cure is effected.

This characteristic obstinancy of ring-worm of the scalp is fully attested by the observations of the most experienced dermatologists.

Dr. John V. Shoemaker's lecture on dermatology in the Philadelphia School of Anatomy, who has had large experience in the treatment of this affection, says: "My observation is that when ring-worm attacks the body and is not complicated, it is easily cured, but when it involves the head it is a most tedious and unmanageable disease, owing to the mischievous influence of the hairs."

Prof. George Henry Fox, Surgeon to the New York Dispensary for Skin and Venereal Diseases, and author of "Photographic Illustrations of Skin Diseases," says: "When ring-worm occurs on non-hairy parts, it is commonly superficial and easily cured. When it has, however, grown into the hair follicles, and even penetrated the hairs themselves, the disease is not readily cured. It may, indeed, prove exceedingly intractable, and occur after it is apparently well."

Dr. Adler Smith, surgeon to Christ's Hospital for boys, in London, in a late number of the "London Lancet" says: "Few medical men, either in consultation or private practice, are aware how incurable some cases of ring-worm are, and a majority consider a case well when it is in a decidedly chronic state."

"Many boys are presented for admission to Christ's Hospital who, while bringing certificates from medical men of the highest professional standing that they are cured, are still suffering from a severe form of the disease."

As to the difficulty of always being able to determine when a case of the disease is cured, the same writer adds: "I consider it extremely difficult to certify that a child who has had ring-worm is absolutely well."

Dr. Smith further says: "Many children in private families have the disease without its being suspected. We issue strict instructions that children who have ring-worm will not be admitted into Christ's Hospital, and yet the average percentage of boys during the last five years that have had the disease unknown to their parents, or were thought to be quite well when brought up for admission, is 8.4."

Since adopting the practice of more careful examination, and making note of the numbers, quite as large a percentage of the children presented for admission here have been found to be affected with the complaint.

About the 1st of July, at my request, you invited Prof. E. S. Dunster of Michigan University, who had several years of practical acquaintance with the

disease on Randall's Island, N. Y., to visit the institution for the purpose of giving us the aid of his counsel and advice. This, notwithstanding the pressure of other engagements, he kindly consented to do. He made a careful examination of the affected children, and into the plan and course of treatment which had been followed, and embodied the results of his observations in a carefully written report. The following selections are taken from that report:

"*First,* In my opinion there is no possible doubt as to the character of the skin disease which has prevailed there. It is the true ring-worm of the scalp, known technically by various names, such as tinea capitis, tinea tonsurans, or tondens, etc., etc. This opinion is based upon a careful examination of the clinical features and history, and also upon a microscopic examination of the hairs and scales.

"*Second,* The failure to eradicate the disease entirely has not been due to any defect or impropriety in the *plan* of the treatment adopted, but simply because the details of the treatment have not been followed up with sufficient energy and frequency.

"It is a disease above all others which demands the most persistent and unremitting attention. The parasite which causes it developes with great rapidity, and a break of even a few hours will sometimes lose all that has been gained previously. While very much has already been accomplished, there being less than one half as many cases now as formerly, I feel quite confident this number would have been still smaller had the attendants unceasingly persisted in carrying out the doctors' instructions. I have therefore to recommend no change in the plan of the treatment now employed, for that is the one found best adapted for this disease; but simply would urge that the details of the plan be pushed more thoroughly and with unrelenting continuance and perseverance, and in submitting the following synopsis of the method which in my judgment is best adapted to eradicate and stamp out the epidemic, you will please understand that it is not intended as a criticism upon the plan already employed, for, on very slight examination, you will see that it is essentially the same, and indeed almost identical with that which Dr. Powers has already adopted."

Since the visit of Prof. Dunster, every effort has been made to act upon his advice, and to carry out thoroughly his suggestions. As a result we have had the satisfaction of observing a more rapid disappearance of the disease. A number of cases yet remain on our hands uncured; but on most of these but slight traces of the affection can be discerned, and it is hoped and believed that before very long the troublesome malady will be wholly removed from the institution. No attention will be withheld and no efforts relaxed until that most important end is accomplished.

D. C. POWERS, M. D.,
Attending Physician.

The actual enrollment in 1878 was 257. In 1879, it was 255, and at the date of this report, September 30, 1880, it is 243. By the first of October, 1881, the number of deaf and dumb will be greater than can possibly be accommodated in this institution, unless it shall be materially enlarged. But the peculiar construction of these buildings is such that they cannot be enlarged by the construction of additions.

The Board of Trustees therefore earnestly recommend that immediate steps be taken for the erection of two cottages, one for boys and the other for girls, on the grounds belonging to the State, immediately adjacent to the buildings of this institution. This plan of enlarging similar institutions has been successfully adopted in New York and Illinois, and has been demonstrated to be not only feasible, but by far the most economical method of meeting the exigencies arising from the rapidly increasing numbers of deaf-mute children. It saves the purchase of additional lands and the multiplication of officers for supervision, and in various ways avoids the necessity for extraordinary expense.

The usual number of industries has been in operation since our last report, until the opening of the present term, when the broom and basket shops were removed with the other effects appertaining to the blind department.

The board see no reason to change their previously expressed opinion relative to the value of these industries as a a part of the general system of instruction in the institution, but, on the contrary, are more than ever convinced that they have a great practical value as a part of the means by which the pupils instructed here shall become self-supporting and therefore self-respecting and reputable citizens of the State when called upon to earn their own livelihood beyond these walls.

In their last report the trustees recommended the following special appropriations, which were made by the legislature of 1879, through the provisions of Sec. 2, Act No. 80, of the laws of that session:

For building one grain barn, with basement	$1,500 00
laying 75 squares of oak flooring	300 00
painting buildings	1,000 00
re-laying stone steps	200 00
building portico	1,800 00
repairing roofs, gutters, etc.	1,500 00
one carriage	300 00
Total	$6,600 00

The portico, in front of the main building, provided for, has been built, under the supervision of Mr. Mortimer L. Smith, architect, of Detroit. Its completion adds greatly to the good appearance of the building, which had always before worn an unfinished look not pleasant to behold, and wholly inconsistent with the wealth and dignity of the great State of Michigan.

A large grain and hay barn, 50x60 feet, with twenty-feet posts, and a deep stone basement for cellars and cow stables, has been built and proves a great convenience in the operations of the farm, and will no doubt turn out to be a good investment for the State.

The various repairs provided for in the appropriations have been made, and the buildings are in a fair state of preservation, and can be kept so by small annual expenditures of money, which the legislature will no doubt provide for from time to time.

In no case has the appropriation for these various improvements and repairs been overdrawn, and in some instances considerably less than the amount appropriated has been expended, the balance having been covered back into the State treasury, the total amount thus returned aggregating $1,176.10, divided as follows:

Current expense	$1,100 00
Stone steps	75 00
Building portico	1 10
Total	$1,176 10

* * * * * * * * * * * * * * *

In order to maintain the buildings in a suitable state of repair, and the institution in a satisfactory condition of efficiency, the trustees feel constrained to ask for sundry small special appropriations, a detailed statement of which will appear further on.

Some of the old floors, a portion of them having been in constant use for over twenty years, are sadly worn out, and will have to be replaced with new ones at once. Some portions of the buildings will need to be re-painted. The laundry is too contracted for either efficient, economical or healthy operation, and very much needs to be enlarged. This room is so situated that it can be conveniently extended at a comparatively small cost. The supply of hose for fire purposes is too limited to be of efficient service in case of an emergency that is liable to arise at any time. Much of that now on hand is in a damaged condition, and, in any event, the supply is too small, and should at once be increased.

If the buildings are to be insured against loss by fire, an appropriation for that purpose will be necessary.

It is believed that, although the school is now full to its utmost capacity, the ordinary current expenses for the next two years can be kept within the limits of the amount asked for and actually appropriated two years ago.

The trustees, therefore, ask for the following amounts for the years 1881 and 1882:

For current expenses, including the operations of the various industries	$80,000 00
painting buildings	800 00
oak lumber for floors	400 00
extension of laundry	500 00
hose for fire purposes	500 00
insurance	1,000 00
Total	$83,200 00

The amount appropriated two years ago was $88,536. As will be seen, the amount estimated in the present report is $5,316 less than that sum.

In view of the removal of the blind from this institution, the trustees would recommend such a change in its name as will make it conform to its actual character. They, therefore, ask the Legislature to amend Sec. 1 of act 1,958, of the compiled laws, approved March 25, 1867, defining the institution, by striking out the words, "and the blind," so that it shall read: "The Michigan Institution for Educating the Deaf and Dumb."

The foregoing is respectfully submitted to your attention, in the confident belief that the interest of the pupils gathered here from all parts of the State for instruction, will receive such consideration at your hands as their necessities and the highest interest of the State shall seem to suggest.

CHARLES G. JOHNSON,
JAMES M. NEASMITH,
ALMON L. ALDRICH,
Trustees.

REPORT OF THE PRINCIPAL.

To the Board of Trustees:

GENTLEMEN:—In presenting a report of the operations of the department of the institution confided by you to my superintendence, it gives me pleasure to be able to state that the great design for which it was established has been prosecuted with zeal and energy, and with a degree of success equal, it is believed, to that of any former period.

For the information I shall give respecting the operations of the institution for the session of 1878–9, I am indebted to the records of my predecessor, the reports of the teachers, and of the other officers.

The 26th day of February last was the anniversary of the opening of the Michigan institution for the education of the deaf and dumb, and the blind. It has now entered upon the twenty-seventh year of its existance. Few, if indeed any, institutions of the kind, in this or any other country, have had a more rapid, more solid, and more prosperous growth than this. Commencing in 1854 with twelve pupils—eleven deaf and dumb and one blind—the number has increased from year to year until now the average attendance annually has reached two hundred and fifty. The whole number of these unfortunate classes here instructed, including those now in school, has been eight hundred and thirty-two. Of these, six hundred and fifty-nine have been deaf and dumb, and one hundred and seventy-three blind.

The difference in the numbers of the two classes who have sought instruction here is worthy of a passing notice. The attendance of the deaf and dumb has been about four to one of the blind. There is not this difference in the numbers of the two classes, as is shown by the census; deaf-mutes are to the blind in the community about two to one; but in the schools in the United States only about three to one attend. According to the latest reports there were of deaf-mutes under instruction in this country over six thousand, while there were only about two thousand of the blind.

Besides the fact that not near so many children are afflicted with blindness as with deafness, there are other reasons for the great difference in the number of pupils of the two classes who are found in the institutions. The blind, in many cases, by medical and surgical treatment, can be relieved of their misfortune; whereas the deaf and dumb cannot, and by the loss of hearing and consequently of speech, are cut off from all oral instruction, and shut out from all the ordinary means of mental, moral, and religious instruction enjoyed by others in the family, the church and the school. They can derive no advantages from these sources, and require special methods and systematic teaching, such as are found in institutions adapted to their particular case.

The following table will show the number of the deaf and dumb and the number of the blind pupils who have each year been admitted to the institution from its foundation to the present time:

NEW PUPILS ADMITTED.

SESSION OF	Blind.	Deaf and Dumb.	Total.	SESSION OF	Blind.	Deaf and Dumb.	Total.
1854–5	1	11	12	1870–1	8	25	33
1855–6	9	30	39	1871–2	6	26	32
1856–7	19	18	37	1872–3	10	27	37
1857–8	11	15	26	1873–4	13	41	54
1858–9	3	16	19	1874–5	7	34	41
1859–60	5	13	18	1875–6	8	39	47
1860–1	2	10	12	1876–7	6	28	34
1861–2	5	15	20	1877–8	7	38	45
1862–3	6	17	23	1878–9	8	29	37
1863–4	.....	25	25	1879–80	2	35	37
1864–5	11	22	33	1880	.....	52	52
1865–6	5	14	19				
1866–7	6	17	23				
1867–8	3	19	22				
1868–9	6	21	27	Total No. admitted	173	659	832
1869–70	6	21	27				

The whole number of pupils instructed since the date of the last biennial report has been three hundred and fifty-eight; deaf mutes, three hundred and six, and blind, fifty-two, as follows:

Number present Sept. 30, 1878, deaf-mutes	194		
" " " " " blind	43		
		237	
New pupils admitted, deaf-mutes	89		
" " " blind	7		
		96	
Former pupils re-admitted, deaf-mutes	23		
" " " blind	2		
		25	
Total number instructed			358
Number graduated, deaf-mutes	27		
" " blind	5		
		32	
Undergraduates withdrawn, deaf-mutes	27		
" " blind	7		
		34	
Blind transferred to the new school		38	
Deaf-mutes absent		12	
			116
Number of deaf-mutes present			242

With those yet to enter this season we count upon having at least two hundred and fifty, an attendance equal to that of both classes in any previous term.

* * * * * * * * * * * * *

For several years past the number of pupils graduated has about equalled the number of new pupils admitted, and the attendance has been annually from two hundred and forty to two hundred and fifty. All worthy applicants have been received, but no special effort has been made to increase the attendance, for the reason that the buildings were already crowded as much as was consistent with the health and comfort of the pupils, and in the expectation that a separate school would be provided for the blind.

The act past by the last Legislature to establish a separate school for the blind, owing to an omission fixing the time for the taking effect of the law, the commissioners to locate and organize the school were not appointed until the opening of the session of the school here; the blind, therefore, were entered here at the beginning of the last school year. Other unavoidable delays occurring in securing a site and suitable buildings, the question of removal was not finally decided until the latter part of the vacation, so that there was but little time left to make the transfer, and the necessary changes in the sleeping apartments and school-rooms used by the blind, to adapt them and to fit them up for the use of the deaf and dumb before the opening of the present session.

These arrangements having been completed, and the blind transferred to Lansing, we proceeded to fill their places with deaf-mutes. Up to the present time two hundred and forty—one hundred and eighty-eight former pupils, and fifty-two new ones—have been received, and with others to come in the prospect is the attendance will soon be as large, if not larger, than it ever has been before.

We congratulate the blind, and also the deaf and dumb, on the separation; it is certainly better for both. Perhaps in the infancy of the State, when their numbers were few, it was necessary to confine the efforts in their behalf to one institution. This was certainly better than to let either class grow up in ignorance. When the effort was commenced, the most prominent idea in the minds of the people was that both these classes were objects of charity, and that they could be better and more economically cared for, fed, and clothed, in a union institution than in separate ones. Hence the institution was called an *Asylum*. But when it came to be considered a school, and in no proper sense an asylum, the incongruity of the union became more and more apparent.

The deprivations from which the two classes suffer are so radically different—the deaf-mute being unable to hear what the blind say, and the blind to see the signs the deaf-mute make—that they, though living in the same house and eating at the same table, could have no converse or communion with each other, except through an interpreter.

As to the means and methods of instruction, and the course of study, there could be nothing in common, and instead of being an aid to each other's intellectual advancement, they were found to be a detriment. And as they had multiplied with the increase of the population of the State so as to require additional accommodations, it was wise and for the best interest of both classes, to provide for their education in separate institutions, as has been done.

As the school for the blind was not organized by the commencement of the last term, those who were members of the school here were invited to return and continue their studies, but no new blind pupils were received. The same teachers in this department were reëlected, and the course of study pursued as formerly.

Miss Emma F. Knight, assisted by Miss Clara E. Young, had charge of their literary studies, Miss Jennie Van Wormer, their music, both instrumental and vocal, and Mr. Herman C. Kœppner, of their industrial training. They all

labored faithfully and zealously, and with a degree of success worthy of praise, as is shown in the report of the Committee on Examination at the close of the session.

In this connection it is proper to briefly refer to the provision made by the Congress of the United States for supplying the blind with books printed in raised letters, and to our action in relation to the matter.

Congress, by an act, approved March 3d, 1879, entitled: "An Act to promote the Education of the Blind," granted an annual subsidy of $10,000 to the institutions established in the United States for their education, to be distributed to each in proportion to the number of pupils in attendance, through the American printing house, a company chartered by the legislature of Kentucky, and located at Louisville in that State. The Michigan Institution for the education of the deaf and dumb and the blind, on the taking effect of this act, became a sharer in this subsidy, in proportion to the number of the latter class of pupils under instruction here.

My predecessor, in anticipation of the availability of this fund, ordered from the American printing house for the blind, books and tangible apparatus in value to the amount of $190.75. These goods were received in good order, and receipted for, and with the other property belonging to the department of the blind, have been transferred to the new school located at Lansing.

The installment of the subsidy for the year 1879 was, in the aggregate, $3,294.52, or $1.51 per pupil under instruction. Our distributive share was $77.54. For the year 1880 the quota per capita passed to our credit was $4.59, or, in all, for the year, $220.31. There is, therefore, over and above the amount expended for the books and apparatus received, remaining to the credit of the Michigan School for the Blind, at the American printing house for the blind, a balance of $102.10 for the current year.

A properly selected library in an institution for the education of the deaf and dumb is of great utility, if not of prime necessity, as must be manifest to every one who will reflect upon the subject. The printed page is to the deaf and dumb of more importance than to almost any other class of persons. All that knowledge which comes to others through hearing must come to them through the eye; and chiefly by means of reading. In fact, after pupils are separated from their teachers, who understand their peculiar language, books become to them almost the only means of intellectual and moral advancement. How narrow must the range of their information be when they leave us, if, while in school, their attention is confined to the lessons of their text books, and the instruction of their teachers. If they do not form the habit and acquire the taste for reading, and for independent investigation while in school, it is not likely they will after they leave. It is observed that those who have not acquired this taste for reading before they leave school generally retrograde instead of advance in general intelligence.

We are glad to know that this want has been acknowledged in the past, and that provision has been made for supplying it, and it is hoped that the same liberality will be continued.

In the year 1872, on the recommendation of Governor Bagley, an appropriation of $2,000 was made by the Legislature for the purpose of supplying amusement and reading matter for the pupils. A portion of this fund has been used from year to year for the supply of periodicals and the purchase of books; and thus a fair commencement in the formation of a library has been made. A room has been provided, and suitable cases supplied. The books had been much used, and many of them were badly worn. During the last vaca-

tion the library has been overhauled, the books that needed binding re-bound, some new ones purchased, the whole classified, labeled, numbered, and re-arranged on the shelves; a complete catalogue made out and printed, and a set of rules adopted for its more efficient preservation and use.

The library has been put in as good condition as possible with the means at our disposal. The fund granted for keeping up the library is now exhausted, and additional provision for this purpose is necessary. It is recommended that either a specific appropriation of $150 annually for the ensuing two years be asked of the legislature for this purpose, or that a sum equal to that be included in the estimate for current expenses, and hereafter the keeping up the library be treated as one of the ordinary, as it is one of the necessary expenses of the institution.

An unusual number of changes in the officers and teachers of the institution has taken place since the publication of the last report, which are worthy of mention.

Miss Phebe Wright, a successful teacher in the deaf-mute department, resigned at the close of the session of 1878–9, and accepted a similar position in the California Institution for the deaf and dumb, and removed to that State. The place thus made vacant was filled by the appointment of Miss Frances MacIntire, late a teacher in the Indiana Institution for the deaf and dumb.

Also, about the same time, Mr. J. W. Parker, the able and efficient principal of the institution, on account of threatened ill-health, and with the hope of regaining renewed vigor in a milder climate, resigned his position here, and, very much to the regret of all connected with the institution, removed to the Institution for the Deaf and Dumb at Olathe, in Kansas, of which he had been elected principal. The writer of this was called to the position thus made vacant, and entered upon the duties of the office, August 1, 1879.

In April, 1880, Mrs. M. E. Clarkson, Second Assistant Matron, who for several years had faithfully performed the responsible and arduous duties of this office, found it necessary, on account of the failing health of an aged mother, to tender her resignation, which was accepted. This vacancy was not filled on account of the anticipated removal of the blind, but the duties of the office for the remainder of the session were performed by the matron and assistant matron.

Mr. George H. Pond, foreman of the printing office, very much to the regret of all connected with the institution, resigned and moved to Ann Arbor. Mr. Charles S. McBride, a practical printer, but at the time engaged in the performance of the duties of supervisor of the male pupils, was promoted to this position, and Frederick C. Newcombe, of Flint, was appointed his successor.

Miss Mollie Sheridan, a teacher in the deaf-mute department, also resigned, having accepted a similar position in the institution at Jacksonville, Illinois, and left at the opening of the present session.

Miss Emma Knight, Miss Jennie Van Wormer, Miss Clara E. Young, and Mr. Herman C. Kœppner closed their connection with the institution at the commencement of the present term; and all of them, except the last named, entered into the service of the new State school for the blind, recently opened at Lansing.

Three additional teachers became necessary in the deaf-mute department of the institution to supply a want occasioned by the resignation of Miss Sheridan and the increased number of deaf-mute pupils admitted since the retirement of the blind. Mr. Thomas L. Heaton, a recent graduate of the State univer-

sity, has been elected to fill one of these vacancies, and has entered upon the performance of his duties. Arrangements are about completed to fill the other two vacancies, so that the friends of the pupils may be assured that a full corps of teachers will be in attendance in a few days. Mr. Heaton has had no acquaintance with the peculiar methods of deaf-mute instruction, but he has entered upon the work with a zeal and energy which, it is believed, if persevered in, will master its difficulties and achieve a good degree of success.

Instruction in articulation has been given as heretofore to a select number of semi-deaf and semi-mute pupils, and with good results. The object aimed at has been to develop and train the voice to utter distinctly words and sentences, and to read and understand from the motions of the lips of others what is said to them, and thus, as far as possible, to qualify them to converse orally.

To obtain the opinion of the friends of those who have been engaged in this study the past year on its utility, a series of questions was propounded to their parents in a brief circular sent to each of them at the close of last session. Twenty-eight replies were returned. The questions asked, and a summary of the answers given, are added below:

1. Has the speech of your child been improved? Twenty-five answered: "Yes;" "some;" "very much;" or, "very much, indeed;" and three answered: "No;" "not much;" or, "very little."

2. Can you understand readily what your child says to you? Two answered: "No;" or, "very little;" twenty, "yes;" three, "very well;" two, "generally;" and one, "as well as what other persons say."

3. Does your child speak orally in the family? Three answered: "Not at all;" twenty, "yes, usually;" two, "yes, but uses signs generally;" one, "yes, sometimes, but not always;" and one, "always."

4. Does your child understand what is said by strangers? Seven answered: "No;" three, "very little;" four, "not readily;" six, "in part;" three, "generally;" and five, "yes."

5. Can your child read simple sentences orally so as to be understood by others? Eight answered: "no;" four, "imperfectly;" one, "by the family;" three, "very well;" and twelve, "yes."

6. Was your child deprived of speech before entering school? Eight swered: "Yes;" four, "not entirely;" four, "could speak some;" six, "could speak imperfectly;" and six "could speak well."

From these answers we think there is encouragement to persevere in this work. Parents seem generally well pleased with the improvement their children have made in this branch of their studies, and are quite desirous that instruction in it should be continued. They say an imperfect speech is of great advantage, and we fully agree with them, and think it ought to be obtained whenever it can be without the sacrifice of other and more important advantages. We consider articulation and lip-reading accomplishments, practicable in some cases and desirable in all in which they can be obtained in a reasonable time and without the neglect of other important studies. Mere mechanical articulation is not education, any more than writing copies with a pen. As a medium of instruction and an instrument of mental development, in the case of the deaf and dumb, it is not to be compared with natural significant signs, the manual alphabet, and writing. There are in this institution, as in all others of the kind, a considerable number of semi-deaf persons and semi-mutes, who possess more or less perfectly the faculty of speech. This ought to be developed, perpetuated, and improved. This can be done on the plan adopted here, without material interference with their other studies.

The number of pupils engaged in this study now is thirty-six. They are divided into six classes of from five to seven each, according to their advancement. Each class spends an hour a day in this exercise. Not much time is spent on drilling in the elementary sounds. We have the pupils proceed as soon as practicable to the utterance of words and sentences. They use the same lessons that they study in the other classes, the meaning of which has been explained to them by signs; and thus when they comprehend what they utter, they become interested, remember better, and improve faster.

There are two methods of teaching articulation. The one is by representing to the eye the sounds of the voice in speech by the letters and the combinations of letters of the alphabet; and the other by means of a system of symbols through which the vocal organs in their actions and relations to each other in speaking, are represented to the eye, so that the pupil is made sensible of the nature of the sounds of his own voice; and so complete are these symbols that any one who has thoroughly mastered them can understand and reproduce any utterance of the human voice in any language written in them.

This system of symbols had its origin in England, in one of the many attempts that have been made to create a universal language. It was invented by Mr. A. Mellville Bell, and was by him for many years urged for adoption upon the attention of the British public, but without success. The system was introduced into this country a few years ago by his son, Mr. A. Graham Bell, the inventor of the telephone, and applied by him to the instruction of the deaf and dumb in articulation, under the name of visible speech. It has been received with favor, and has been introduced into a majority of the institutions of this country in which articulation is taught. It is not used, however, in many of them as the basis of the system of instruction pursued, but only as an aid in teaching articulation.

Some, however, of our most eminent teachers of articulation, both in this country and in Europe, object to the use of these symbols, on the ground that they are only another alphabet, no better than the common letters to represent the sounds of the human voice; for, they say, the pupil, after he has learned their significance, has to transfer their meaning to the letters of the alphabet before he can read them from sight; and that the symbols are so different in form and figure from the common alphabet that it takes the learner a long time to become familiar enough with them to use them to advantage; and after he has mastered them he has to throw them aside and substitute the ordinary characters, which, they say, is a loss of time, and only complicates the difficulty of learning to speak.

While there may be some force in this objection, yet it is more apparent than real. The object is not at first to make the pupil understand the meaning of vocal sounds, but to get him to produce them, to bring into flexibility and control his vocal organs. By Mr. Bell's system of symbols the exact position which the vocal organs assume in uttering any sound can be shown, and by leading the pupil to observe the motions of his own organs, and to control them, the whole mechanism of speech is revealed to him, and by studying the corresponding symbols written on the slate, he is enabled to produce the sounds expressed by the symbols. The pupil understands his own utterances from sight, and the teacher his from hearing, and every stage of the process is definite and pleasant to both. The significance of the vocal sounds called out by the symbols is no more difficult to understand than those expressed by the letters of the alphabet.

We find the system to be very useful, not only in the education of the ele-

mentary sounds of the alphabet, and in their combination and enunciation in words and sentences, but especially so in the case of the semi-deaf and semi-mute, in correcting and improving their speech, and in aiding them in the understanding of the speech of others.

Attention is called to the sanitary condition of the institution, as set forth in the report of the physician, Daniel Clarke, M. D., herewith submitted. It certainly speaks well for his skill and faithfulness, as well as the healthfulness of the location, the regimen adopted, and the general care and management of the establishment, that another two years has passed without a single death among the pupils. It is a record not often found in a family of children and youth so large as the one assembled here.

The recommendations in the report as to the improvements needed in the hospitals and the stairs leading to the dormitories, and the better ventilation of the school rooms, are all worthy of careful consideration.

Besides the estimate for current expenses for the ensuing two years, there are several other specific wants that ought to be provided for at this time.

The floors in the basement of the north and south wings of the buildings were originally laid with soft pine, and are in places worn entirely through, and ought to be re-laid as soon as possible.

When the wash-house was built the room now used as an ironing-room was intended for and used only for drying the clothing by hot air brought in from the flues, and the ironing of the clothing was done in one of the apartments in the basement of the school building. Afterwards, when this space was required for other purposes, the work was removed to the drying-room, where it is now performed. The space is barely large enough for the purpose for which it was originally intended. The steam coils and racks for drying the clothing occupy about two-thirds of the room, and leave but very little space for anything else. Besides, the intense heat from the coils and steam from the drying of the clothes, render the place exceedingly inconvenient and uncomfortable, and at times almost unendurable. Fortunately the evil can be remedied at comparatively a small expense. It is proposed to add to the present building an additional room, large enough for the purpose named. The estimated cost of this improvement, all complete, is five hundred dollars, and it is earnestly recommended that provision be made for it at as early a day as possible.

The window-shades, bought six years ago for the east and west wings of the buildings, are all of them badly worn, and the greater part of them beyond repair, and will have to be replaced—some of them now, and all of them soon—with new ones. Experience has proven that inside blinds, such as are used in the front building, are the best and in the end the cheapest. It is, therefore, recommended that provision be made for inside blinds, if not now for the whole of the two wings, at least for the windows of the two large sitting rooms for the use of the pupils.

In all institutions, but especially in one like this, filled with children that cannot hear, the occurrence of a fire is dreadful to think of, and every precaution should be taken to avoid such a calamity. We have an abundant supply of water, a good engine and pumps, with water tanks and fire buckets kept filled in all parts of the buildings occupied by the pupils, and fire-plugs in convenient places for the attachment of hose, in case of necessity. There is, however, no hose suitable for use for this purpose. There ought to be hose kept attached to these fire-plugs ready for instant use on an alarm of fire being given. What hose there is has been on hand from ten to fifteen years, and is

practically useless for protection from fire. It is so old and rotten that it will not bear the pressure necessary to force the water to the upper parts of the buildings, and ought to be replaced by the purchase of a new supply. We, therefore, recommend that provision be made for the purchase of four hundred feet of rubber, and two hundred feet of linen hose suitable for the purpose named.

Finally, we invite attention to the condition of the wood work of the buildings. Much of it, both inside and out, is badly needing to be repainted, and especially those parts exposed to the weather. In places the paint is worn off so that the wood is beginning to decay, and if not soon repainted will have to be renewed entirely. Here, if anywhere, "a stitch in time saves nine." The buildings should be kept well painted, not merely for appearance's sake, but in the interest of true economy. We recommend that provision be made for this want also.

In behalf of the pupils and their friends, we tender our sincere thanks to the officers of the following railroads for passing our pupils free of charge on their return to their homes at the close of the sessions of 1879 and 1880: The Flint & Pere Marquette, the Chicago & Grand Trunk, the Detroit & Milwaukee, the Lake Shore & Michigan Southern. And also, to the Michigan Central Railway for conveying our pupils, on the same occasions, to their homes at reduced rates.

We also wish sincerely to thank the proprietors and publishers of the following papers, gratuitously contributed for the use of the pupils:

FROM MICHIGAN.

Post and Tribune, Detroit.
Michigan Farmer, Detroit.
Our Diocese, Detroit.
Home Messenger, Detroit.
Public Leader.
Detroit Graphic.
Western Home Journal, Detroit.
Ann Arbor Courier.
Ann Arbor Register.
Benton Harbor Palladium.
Battle Creek Journal.
Fentonville Independent.
Charlotte Republican.
Adrian National Greenback.
Buchanan Record.
Niles Republican.
Hastings Banner.
Alpena Argus.
Marshall Statesman.
Pontiac Bill Poster.
Traverse Bay Eagle.
Port Austin News.
Niles Democrat.
Tecumseh Herald.
Maple Rapids Dispatch.
Morrice Times.
Albion Record.
Leslie Local.
St. Louis Herald.
Grange Visitor.
Wyandotte Herald.
Three Rivers News Reporter.
Otisville Telegram.
Cheboygan Democrat.
Saginaw Herald.
Saginaw Bulletin.
Lansing Republican (tri-weekly).
Monroe Commercial.
Flint Globe.
Flint Citizen.
Flint Sunday Democrat.
Flint State Union.
Ypsilanti Sentinel.

FROM OTHER STATES.

Anamosa (Iowa) Eureka.
Talladega (Ala.) Messenger.
Catholic Herald, N. Y. city.
Catholic Universe, Cleveland, Ohio.
Weekly Witness, N. Y. city.
Sunday School Messenger (Ohio).
Evangelical Messenger (Ohio).
The Living Epistle (Ohio), monthly.
Donohue's Magazine, (Boston), monthly.
Ohio Spy (Springfield, Ohio).

DEAF-MUTE PAPERS.

Deaf-mutes' Journal (N. Y., weekly, three copies).
Deaf-mute Advance (Illinois, weekly, two copies).
Deaf-mute Leader (Brooklyn, N. Y., semi-weekly).
Goodson Gazette (Va., weekly, 2 copies).
Tablet (West Va., weekly, 2 copies).
Star (Kansas, weekly, 2 copies).
Chronicle (Ohio, weekly, 3 copies).
Companion (Minnesota, weekly, 3 copies).
Deaf-mute (Kentucky, weekly, 2 copies).
Observer (Tenn., weekly, 2 copies).
Journal (Nebraska, weekly, 2 copies).
Record (Missouri, weekly, 2 copies).
Silent World (Toronto, Canada, 2 copies).
Silent People (New Hampshire, 2 copies).
Chicago Letter (Ill., monthly, 2 copies).
Modern Times (Wis., weekly, 2 copies).

All of which is respectfully submitted.

THOMAS MACINTIRE,
Principal.

MICHIGAN SCHOOL FOR THE BLIND.

REPORT OF THE COMMISSIONERS.

To the Governor of the State of Michigan:

The commissioners appointed to locate and establish a separate school for the blind, respectfully report to you as follows:

The act authorizing the appointment of a commission was approved May 31, 1879, and the commissioners appointed under date of September 19, 1879, in compliance therewith were John J. Bagley of Detroit, Townsend North, Vassar, and Tom S. Applegate, Adrian.

On October 16, 1879, the commissioners held their first meeting at the Institute for the deaf and dumb, and the blind, at Flint, and organized as follows: President, Townsend North; Secretary, Tom S. Applegate; Treasurer, John J. Bagley. By the provisions of Section 4 of the act to establish a separate school for the blind, the commissioners were empowered to "rent suitable buildings or rooms for a separate school for the blind, to be occupied until the buildings hereinafter provided for are completed and ready for the reception of pupils." After consulting with the trustees of the Flint institute it was decided that it would be unadvisable to secure a temporary location, for the reason that the 1879–80 term of the Flint institute had already begun, and the blind pupils were already there and proceeding with their studies. This saved to the State the sum of $5,000. It was, therefore, thought best to select a suitable site and erect the buildings thereon, readiness for the opening of the next school year.

SELECTING SITE.

Propositions for the location of the school were received from various places in the State, and on the 28th of October the commissioners visited Vassar, Tuscola county, and inspected a site tendered by the citizens of that place.

It was concluded at that meeting that in order to procure information relative to the needs of such a school as contemplated by the act the commissioners should visit the school for the blind at Janesville, Wisconsin, and also the one at Indianapolis, Indiana. On the morning of November 22, 1879, two members of the board met in Chicago, and proceeded to Janesville to inspect the institution there. They remained in Janesville until Monday afternoon succeeding, and were received there with the utmost courtesy, both by the resident trustees and by Mrs. Little, the accomplished and capable superintendent of the institution. So much information was received there that it was thought unnecessary to visit the Indianapolis institution.

On the 10th of December two members of the commission visited Monroe,

and inspected some three or four sites, the citizens of the place giving us the privilege of selecting either for the location of the school. On the same day several sites were inspected in Adrian, and a meeting was held in Detroit on the 11th, at which there was some informal discussion in regard to the sites offered, and it was decided that the commission should visit Owosso. On December 11th, in consequence of the pressure of private business, John J. Bagley resigned from the commission.

On the 17th the Governor appointed Rowland E. Trowbridge, of Birmingham, Oakland County, to take the place on the commission made vacant by the resignation of John J. Bagley. Mr. Trowbridge was also elected treasurer by the board in place of Mr. Bagley. On January 7, 1880, two members of the board visited Niles, and inspected sites offered by the citizens for the location of the school. On the 15th, sites were inspected at Charlotte, on the 16th, at Owosso and Fenton. On Tuesday, March 9th, the commissioners met, with yourself, at the Michigan Exchange hotel, Detroit, and at that meeting the proposals received from various places in the State were examined. After the proposals had been carefully examined, a vote was taken, but no decision was reached. A proposition was subsequently made to the board, by the Grand Lodge of Odd Fellows, of the State of Michigan, tendering the buildings and property at Lansing to the State of Michigan, for the use of a school for the blind, at the price of ten thousand dollars.

On May 18th, the commission met in Lansing, to inspect the building and employed George Watkins, of Bay City, and L. Mortimer Smith, of Detroit, to make an inspection of the building as architects, and report as to its safety for the use designed. Both gentlemen reported, assuring the commission of the substantial character of the building, and negotiations then began with the officers of the Grand Lodge, I. O. O. F., looking to securing the property on lease as a temporary location. On the 30th of June, 1880, the board executed the following lease with the Board of Commissioners for the Odd Fellows' Institute of Michigan:

LANSING, June 30th, 1880.

To the Honorable the Board of Commissioners organized for the location and control of a State School for the Blind:

GENTLEMEN:—The undersigned, members of the Board of Commissioners of the Odd Fellows' Institute of Michigan, hereby make the following proposals for the rental of said institute property in the city of Lansing, for, and during the period of time from the date hereof until September 1st, 1881.

It is agreed on the part of the board of commissioners of the said institute as follows:

First. That the board of commissioners of said School for the blind shall have the use and occupancy of said institute property for and during the period of time aforesaid, for the purpose of said school.

Second. That they shall have the benefit of any leases now existing under and by virtue of any authority of the Grand Lodge, I. O. O. F., Michigan.

Third. The said commissioners for the school for the blind are hereby granted the privilege of the purchase of said institute property at any time during the period of time aforesaid upon the terms and conditions now offered, and pending before said board, through W. J. Baxter, Esq., in behalf of the Grand Lodge, I. O. O. F., Michigan.

Fourth. That said board shall have peaceable and quiet possession of the said property during the time aforesaid upon the following terms and conditions, to-wit: At a rental sum of one thousand dollars per annum, payable as follows, viz: The sum of one thousand dollars upon the execution and delivery of this agreement, and the remaining sum at the expiration of this lease.

Fifth. Said board of commissioners of the school for the blind agree to cause an insurance upon said property in the sum of ten thousand dollars ($10,000) in a responsi-

ble company and for the benefit of the Grand Lodge of Michigan, I. O. O. F., during the time aforesaid, and further that said board shall pay or cause to be paid all taxes on said property for the years 1880 and 1881.

E. H. WHITNEY,
D. BURNHAM TRACY,
E. G. D. HOLDEN.
For the Board of Commissioners of the Odd Fellows' Institute of Michigan.

(ENDORSED:)
The undersigned commissioners to locate and establish a separate school for the blind, hereby accept the within proposition.

T. NORTH,
TOM. S. APPLEGATE,
CHARLES M. CROSWELL.
Commissioners.

Dated Lansing, June 30, 1880.

On the 29th day of September the school opened in the leased building with the following corps of teachers and employés:

Superintendent, $1,000; matron, $400; 1st literary teacher, $400; 2d literary teacher, $350; teacher instrumental music, $450; teacher vocal music, $300; book-keeper, $300; teacher sewing, $6 per week; nurse, $3 per week; cook, $25 per month; dining room girl, $2.50 per week; dining room girl, $2.50 per week; chamber maid, $2.50 per week; woman, general work, $2.50 per week; visitors' attendant, $2 per week; hostler and fireman, $20 per month; man of all work, $20 per month; night watchman, $30 per month; washer woman, 80 cents per day; ironing woman, 75 cents per day.

EXPENSES.

The law providing for the establishment of a school for the blind appropriated for buildings $30,000; current expenses for 1879, $5,000; current expenses for 1880, $10,000, making a total appropriation of $45,000.

The following amounts have been charged to the appropriation of $30,000 for

Expenses of commission:

	Per Diem.	Expenses.	Total.	
John J. Bagley	$9 00	$10 60	$19 60	
Townsend North	147 00	214 33	361 33	
Tom S. Applegate	153 00	197 63	350 63	
R. E. Trowbridge	39 00	52 18	91 18	
Totals	$348 00	$474 74	$822 74	
Furniture			1,583 75	
Sewing machine			35 00	
Total				2,441
Balance of $30,000 appropriation, September 30, 1880				$27,558

The following amounts have been charged to the appropriation of $10,000:

Rent	$1,000 00	
Insurance on building	120 00	
Fitting up building—		
Hardware	45 36	
Carpenter work and material	313 78	

MICHIGAN REFORM SCHOOL FOR GIRLS.

REPORT OF THE BOARD OF CONTROL.

To the Governor, the Legislature, and the Secretary of State:

The Board of Control of the Michigan Reform School for Girls, hereby submit for your consideration this their first annual report:

Having been notified of our appointment as the board of control of the institution, we met upon the call of Governor Croswell, at the executive office, Lansing, on January 27, 1880, and proceeded to organize in accordance with the requirements of the law, by electing Mrs. Samuel L. Fuller, President; Hon. W. H. Waldby, Treasurer; Miss Emma A. Hall, Clerk. At a subsequent meeting the treasurer handed in the required bond which, upon being duly approved, was deposited with the Secretary of State.

Immediate measures were taken to procure a site for the school, and in accordance with the law, sealed proposals were advertised for in several papers in the State, for donations of land and money. Proposals were received from the following places: Owosso, St. Louis, Allegan, Marshall, and Adrian—which were opened the first day of April, 1880.

Owosso offered 25 acres of cultivated land in the northwest portion of the city. Brick to be furnished for building at $3.50 per thousand in the brick-yard, or delivered upon the building lots at $4 per thousand.

St. Louis offered: *First.* Forty acres of land one-half mile west from the center of the village; water-pipes to be extended to buildings, and four of Holly's best double hydrants to be placed near buildings; use of water free during life of lease of village water-works, which is thirty years, and five hundred dollars in labor.

Second. Eighty acres of land about one-half mile south from the center of the village, and same water supply as mentioned in first proposal, and same amount of labor.

Allegan offered five or six locations of about 25 acres each, promising that with some of them money or material would be donated, the amount not named.

Marshall offered twenty-six acres of land with the buildings and appurtenances, situated within the corporate limits of the city.

Adrian offered: *First.* The south twenty-five acres of land of the "Hickory Shade Farm" (but reserving all the buildings thereon), with the sum of $6,000 additional in cash.

Second. Forty acres of land of same farm lying on west side of highway (but reserving all of the buildings thereon), with $4,000 additional in cash.

Third. The forty acres of land above mentioned and all of the buildings now standing on said forty acres, with $3,000 additional in cash.

During the week beginning April 5th and ending April 10th the board visited these several localities, and found all of them desirable in some respects. Adrian, however, offered the greatest inducements, and the board consequently selected that place as the site for the Institution.

The property thus secured lies about one-half mile north of the city limits on an elevation over-looking the city, and much of the adjacent country. The gift comprises forty acres of the choicest farming land in Lenawee county, fifteen of which is a beautiful grove. The land has good natural drainage, and a bountiful supply of water. The surroundings are eminently healthy and beautiful. In addition to the land there is a good farm-house and two barns with some other outbuildings. The citizens of Adrian supplemented this liberal donation with the sum of three thousand dollars in money, to be expended in ornamenting the grounds under the direction of the board.

The site of the school being established, the board at once advertised for plans, and afterwards for proposals for the erection of the buildings. After mature deliberation, and several conferences on these important subjects, they accepted, with alterations and curtailments, the plans offered by Mr. Mortimer L. Smith of Detroit, and contracted with Mr. James Donough of Adrian, to erect two cottages for the sum of twenty-five thousand five hundred dollars, and engaged Mr. J. P. Thompson of Adrian, an experienced builder, as superintendent of the work. The buildings are contracted to be completed the first day of July, 1881. The board finding the limited appropriation of the legislature of thirty thousand dollars inadequate to complete an administrative or central building, and one cottage, and not wishing to incur debt, changed their original intention, and deemed it advisable to build two cottages, which would accommodate thirty inmates each, trusting your honorable body would make a liberal appropriation for going on with the work. The evidence and testimony from all quarters show conclusively that these two cottages will not afford sufficient room to receive the girls who, according to the law, will be subjects for this reformatory during the next two years. The president has written to, and conversed with, a number of gentlemen throughout the State, who are competent to judge in this matter, asking an expression of their opinion as to the probable needs of this school, in this regard. All agree as to the necessity of ample accommodations for this class of girls, when once a place is provided for them. Hon. H. W. Lord, secretary of board of corrections and charities thus writes: * * * "There having been no place to which delinquent girls and women could be properly sent, they have remained substantially at large. I have no doubt that you will have more offered than you will be likely to have room for, either the first or second year. * * * Detroit alone would have in course of each year at least 100 girls that ought to be sent there."

Hon. Moreau S. Crosby, of the board of corrections and charities, writes: "My interest in the Reform School for Girls leads me to urge on the part of your board increased accommodations for that large class in our State who need the restrictions of such an institution. * * * The appropriation already made can hardly be sufficient for more than the partial carrying out of intentions of the special friends of the school. Therefore at the approaching session of the Legislature more funds should be asked, not only for additional accommodations, but also for current expenses for next two years. To provide for 300 would be no excess, and I believe at no distant day 500 will be occupants if we shall provide therefor."

Bishop G. D. Gillespie, also of the board of corrections and charities, and who more than almost any other person in the State has visited the jails, poor-houses and prisons, and in other respects has investigated the subject before us, writes: * * * * * "I am puzzled in answering the inquiry by the terms employed in the law, 'being a disorderly person' (Sec 10). If the girl whose unchastity is brought under strong suspicion, as by her being on the streets late at night, the company in which she is found, etc., is 'a disorderly person,' there certainly will be a large number of girls committed to the school. I have made inquiry in various places as to the number of girls who are leading vicious lives; the common reply is, 'we have a good many girls here who ought to go to that reform school.' * * * Allow me to call the attention of your board to the propriety of securing such an amendment to the law as will give the superintendent liberty to refuse visitors, who came from mere curiosity or for evil design. In my judgment, all our penal and pauper institutions are thrown open far too much to the public, but in the case of this school there is a special propriety in exclusion."

Hon. C. D. Randall, secretary of the board of control of the State public school for dependent children, and who has given great attention to all matters pertaining to reform, writes: * * "You will no doubt also take into consideration the fact that few girls are convicted, for the reason the courts consider there is now no proper place to send girls. Consequently the number is not shown by the number in jails, house of correction, etc. Too many are left on the streets that would be sent to the reform school were there one."

The above short extracts from letters written by gentlemen whose position on our boards of charities makes their opinions especially worthy of respect, show that the present accommodations will be very limited. To their testimony might be added that of superintendents of the poor, magistrates, and members of benevolent associations—both ladies and gentlemen—throughout the State. And this board also appeals to the conviction of every member of this legislature.

Connecticut, with a population about one-third that of Michigan, had in the reform school for girls at Middletown, for the year ending December 1, 1879, 142 girls.

Massachusetts, with a population about the same as that of Michigan, had 149 girls in the reform school for girls at Lancaster, besides 101 under 20 years of age in the reformatory prison for women at Sherborn, as shown by report ending Sept. 30, 1879.

In Ohio, with a population about twice that of Michigan, there were, during the year 1878, 285 girls in the reform school for girls at Delaware. The trustees in their report say: "Our numbers are limited only by the capacity of our buildings. Applications from the several probate judges are far beyond our capacity."

The Wisconsin reform school for girls at Milwaukee, not a State but a private institution, had during the year ending Dec. 10, 1879, 97 inmates.

Reports of similar schools in New Jersey, Illinois, and Maine all prove that when a place is provided for these girls the demand for admission is at once urgent. It must then be evident that this reform school of ours is likely to be full as soon as it can be made ready for occupancy, and that more ample accommodations than at present provided are required to meet the need of this large and growing State for the next two years.

It will be seen that no provision is now made for a school and chapel building, where all the inmates can be gathered for general instruction, and which

is indispensable to the successful prosecution of the work. Two more cottages are needed. These, with the two already being erected, must have heating and cooking apparatus, furniture, etc., as will be seen by the estimates appended to this report.

There ought to be in the future an administrative building for the use of the superintendent, for executive offices, library, etc., etc., but for which we will not ask until we have more cottages, so that the girls can be classified properly.

We, as the board of control, deem it impossible to carry out the intention of the act establishing this school, without legislative appropriation sufficient to place it upon a proper basis, and establish a thorough system from its foundation. We trust your honorable body may see fit to make such appropriation as will enable us to to do the work in a manner satisfactory to you and to them, and commensurate with its great importance. These girls are to be committed to our care by your order; it is but just to us, to you, and to them, to give us means to do our work well—or else we ought not to be judged by the results. No thinking person can ignore the evil this class of girls do to society, and the importance to community of rescuing them from their low estate. To save them from their evil lives and surroundings—from preying and being preyed upon—is not only humanitarian, but in the highest sense self-protecting in all its aspects.

There are two distinct points to be considered in providing for these girls: First, the numbers; and second the best means of providing for them. According to the testimony already quoted of persons qualified to judge, it is obvious that the buildings now being erected will by no means furnish sufficient accommodations for the ensuing two years.

The second point—how best to provide for the ever increasing number during that period, must be considered in connection with the character of the girls themselves. Most of them will undoubtedly be simply vagrant and viciously inclined girls, who, under proper guidance and care, will soon improve, and in no long time become useful and respectable women. But there will be another class who have fallen very low before they are sent to the reform school, and who, from physical as well as moral causes, will require a longer and stricter discipline. Communication between them and the others, should be, as far as practicable, shut off. Indeed, it is absolutely necessary for the good of the whole, that the school should be graded. To do this will require a cottage in which the most vicious and physically impure delinquents can be more distinctly isolated, and placed under greater restrictions than the other inmates. Giving these offenders the stimulus for good behavior the promise of removal to another cottage, where their privileges shall be greater, will help more than any one thing to secure their co-operation with efforts made by the officers of the school for their good. It will thus better accomplish the end of this Institution—*Reform.*

There can be no doubt that these reformatories accomplish the end for which they are established. The results of 36 similar institutions in the United States are to be found in a tabulated form printed in the transactions of the National Prison Congress at St. Louis in 1874. According to statistics three-fourths of the children, or 75 per cent., were known to be permanently reformed and leading upright lives. The superintendent of Lancaster school, Massachusetts, in 1870, gave the results of seventeen years' experience of that school; of those who left have the school from 1-5 to ¼ were known to be married, and with few exceptions, doing well; two-fifths were known to be worthily and honorably supporting themselves, making at least 3-5 known to be

ALBION COLLEGE.

REPORT OF THE PRESIDENT.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—In compliance with the provisions of the statutes of the State, I herewith transmit my report of the work of Albion college, for the year ending June 24th, 1880:

The history of the past year affords much that is gratifying to the friends of the institution. The number of students, 244 in all, is a little in excess of the preceding year.

At the commencement seventeen students graduated from the college. One received the degree of Bachelor of Science, nine the degree of Bachelor of Philosophy, and seven the degree of Bachelor of Arts. Six persons completed the course in the Conservatory of Music, one of these receiving the degree of Bachelor of Music, having in addition to the music taken a full course of literary studies; while to five of these students were given diplomas, certifying to the fact that the work in music had been completed.

The requirements of the institution are each year made more extensive, and are more rigidly enforced. The intention is to grant no degrees unless they are fully earned, according to the standard of the best colleges of the country.

The museum has received some valuable additions, principally from South America. A portion of the summer of 1879 was spent by Prof. Fall in the region of the Amazon river. Quite a variety of specimens in ornithology, and from other departments of the animal kingdom was secured. The museum has also been enriched by a considerably large collection of corals, shells and minerals. Some additions have been made to the collections of birds and animals of our own latitude. The college is now giving special attention to the work of providing this form of educational appliances.

Since our last report the natural science department has been provided with new and greatly improved quarters. A large lecture room has been constructed, a very commodious working laboratory fitted up, and convenient apparatus and chemical rooms supplied. The students, during the junior year, give one term to laboratory work, taking up a course in chemical analysis.

The institution is doing a varied and comprehensive work. Aside from the college there is a school of art, consisting of a conservatory of music, and a department of painting, drawing, and architecture. It carries forward a teachers' department and a preparatory school. In the college there were sixty students, in the school of art seventy, and the balance of the number was divided between the teachers' department and the preparatory school.

The income of the college was, in round numbers, $17,500, and the current expenses $16,000. The economy practiced has enabled us gradually to reduce a debt incurred some years ago, which is now about $14,000. It is hoped that measures will soon be put in operation to cancel the entire indebtedness.

The income of the college comes from the following sources: There is a general endowment fund of about $145,000 held by an Endowment Fund Committee created by the Legislature. This committee is forbidden by statute to pay over to the trustees or other authorities of the college any portion of the principal. It is thus impossible for the fund to be squandered.

There is a Local Endowment Fund Committee residing at Albion, which controls $25,000, raised in Albion and vicinity.

Aside from the above each student pays an incidental fee of $5 per term, or $15 per year. The students in music are charged $12 per term for tuition, and the students in painting $20 a term.

The salaries of professors, agents, etc., amount to $10,961. The $5,000 in addition to the foregoing sum paid out for current expenses covered bills for improvements of buildings and grounds, fuel, lights, printing, postage, laboratory, museum, library, etc.

Two years ago the dormitory system was dispensed with, and we think with good results. That it was out of harmony with the best training in a college we believe, and students in a preparatory school even can be cared for to better advantage in connection with homes than by being massed in college halls.

The morals of the students merit special mention. A vicious or depraved student is an exception. Few immoral young men care to apply for admission, and those who possess loose notions of manly character are generally won into a better life by the positive influences for good by which they are surrounded. There is no hazing, and objectionable practices and "college irregularities" belong almost wholly to the past.

Albion college is a denominational but not a sectarian institution. It is under the management of the Methodist Episcopal Church, but no theological tests are applied to students upon entering, nor is any inquiry made as to their church membership or church preferences. No influence is used for sectarian ends.

The government of the college is primarily in the Detroit and Michigan conferences. These bodies appoint the trustees who are required to make an annual report of their doings, and the work and condition of the institution to these conferences. The trustees elect the president and professors of the college, and exercise a general oversight of its affairs. The faculty are not elected year by year, but hold their chairs for an indefinite period.

With a very flourishing university in our State, ready to do all the work it is asked to do, and affording extensive educational advantages, why, it may be asked, does Albion college, as well as other denominational institutions, come into the field and bid for patronage? Is there any good reason for any other than a State institution in Michigan?

Albion college sprang out of the conviction of the need of positive religious influences to be supplied to young men and women during the period of their school days. Feeding the intellect in utter neglect of the heart, or in other words, supplying the mind with facts and principles which are never traced to their real source in a first cause or personal God, is a partial work. Secular education is a divorcing of parts which belong together, and which alone in union form complete truth. Every thing that is taken out of its relations is shorn of its real significance. A human body is without meaning when viewed

apart from the soul which dwells within it and makes it its instrument. Science and philosophy are divested of all their glory, and fail to teach any lessons of final and grand import when taken up into the mind in the state of orphanage, which does not recognize any divine fraternity. A temple without foundation, built in the air, is a very unsubstantial thing. Take God out of his creations, and what remains to satisfy the mind, which is ever seeking for the philosophy of things? Knowledge is complete only when it embraces all subsisting relations. And are not divine relations the most vital and fundamental of all?

Considerations like the above, in connection with the conviction that it is both unphilosophical and unsafe to feed for years one department of man's life, leaving another department to starve, that the whole moral and religious nature of man should be cared for while the intellect is being trained, led to the founding of Albion college, and the employment of the efforts now made to give it complete success.

All of which is respectfully submitted,

L. R. FISKE,
President.

ALBION, December 1, 1880.

HILLSDALE COLLEGE.

REPORT OF THE VISITORS.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—The undersigned, visitors by your appointment to Hillsdale college for the school year 1879-80, beg permission to make the following report:

Though unfortunately we were not able to make any joint visit to the institution, still we have individually made several visits. We have seen the college doing its its daily work in its work-day garb, we have seen the work of its annual class examinations, and we have witnessed its more formal and public exercises when in its gala-day attire of commencement week. In all of these aspects we have found the work of the institution of a very high order of excellence.

The college buildings are situated upon a splendid eminence commanding a fine view of the city of Hillsdale, and of the beautiful country for miles around —furnishing a landscape that must have inspired the art department, which is no small part of the attractions of the college. The buildings are five in number, capacious, pleasing in architecture, and so grouped as to present an imposing appearance. As soon as some friend of the college shall honor himself by furnishing the means of erecting a building that will provide a hall large enough for the throngs of commencement, and also give space for the better accommodation of the fine library and growing collections, the institution will lack nothing in that direction. One of the most noticeable things, and one that soon strikes pleasantly any visitor, is the splendid *esprit de corps* of the institution. One heart, one spirit animates all—president, faculty and students. In all the exercises, whether daily recitations, examinations, society anniversaries, class reunions,—literary, musical, or social—one spirit pervades, a spirit of loyalty to and faith in the college, past, present and future. Every one seems to feel he is a part, and expected to perform each duty so as to bring honor to the college. All are earnest workers. As pleasant a sight as any we saw was a company of young men and women students at work with the utmost zeal and cheerfulness helping their teacher prepare and mount specimens in natural history for the museum.

Very much of this oneness of spirit we believe is due to the large, kindly heart and wise head of Dr. Durgin, the president.

We visited exercises in all the departments of the college and found an earnest, studious spirit prevading everywhere. An exercise in geometry, conducted by the young but gifted Professor Haynes, one in English by the ac-

complished lady principal, Miss Phillips, a recitation in Latin and one in German, are remembered as examples of the good work we saw everywhere.

There are three things to which we desire to call your attention:

First. Hillsdale college is the only one in the State, we believe, which maintains a theological school. This department, with its venerable faculty, doubtless contributes largely to the deep Christian spirit that pervades the institution.

Second. No college in the State maintains so complete an equipment for a thorough commercial and business education. In this department Profs. Rideout and Drake, with their assistants, give practical instruction in bookkeeping, penmanship, telegraphy, and commercial law.

Third. No institution in the State, except the university, has better, if indeed so good, collections for instruction in natural history. *Larger* collections there are, but none so admirably arranged for working purposes. For this the institution is largely indebted to the indefatigable and zealous young naturalist, Prof. D. M. Fisk.

Permit us to express the hope that the recent generous gift to the college by the heirs of Hon. H. Waldron, is but the precursor of other benefactions that shall help enlarge the usefulness of so deserving an institution as Hillsdale college has proven herself to be.

LEWIS McLOUTH,
E. W. CHILDS,
GEO. ROBERTSON,
Visitors.

HOPE COLLEGE.

REPORT OF THE PRESIDENT.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—The following are the material facts concerning Hope College, at Holland, Ottawa county, for the academic year ending June 23, 1880:

No special report was made in 1879. Only the "general and financial statistics" of the college were forwarded by me for that year, and these were published, on pages xxix and xxx of your last report. Not much additional information could then have been furnished.

THE COUNCIL.

The amended constitution, (referred to in 1878) being placed on file in the office of the Secretary of State, at Lansing, went into operation after July 1, 1879. According to its provisions, the council is hereafter to be thus composed, viz:

The president of the college, *ex-officio*; five members, to be appointed by the general synod of the Reformed Church in America; two members, to be appointed by each of the (*now five*) classes in the particular synod of Chicago. At present, therefore, the board consists of sixteen (16) members, of whom seven (7) shall constitute a quorum.

The term of office, except that of the president of the college, is five (5) years, and the regular meetings are on the last Wednesday in April, and on the Tuesday next preceding the commencement in June. The new council met and organized, April 28, 1880, and again, with a full attendance, the 22-24th of June.

PRESIDENT OF THE COLLEGE.

Rev. G. H. Mandeville, D. D., of New York city, resigned, the resignation to date from July 1st. It was not deemed advisable to fill the office permanently at the present time, and Prof. Charles Scott, D. D., was elected in the place of Dr. Mandeville, as provisional president.

OFFICERS OF THE BOARD.

President, Rev. John H. Karsten, Waupun, Wis.; assessor, Rev. J. S. Joralmon, Fairview, Ill.; secretary, Rev. Peter Lepeltak, Overisel, Mich.; treasurer, Prof. C. Doesburg, Holland, Mich.; executive committee, the presi-

dent, Charles Scott, *ex-officio*, Revs. N. W. Steffens, P. Lepeltak, J. F. Zwemer, and J. Van der Meulen. The executive committee meets bi-monthly.

Corps of Instruction.

The various chairs of the institution were filled, by ballot, as follows:

Rev. Charles Scott, D. D., professor of chemistry and natural history.

Rev. T. Romeyn Beck, D. D., professor of ancient languages and literature.

Cornelis Doesburg, A. M., professor of modern languages and literature.

William A. Shields, A. M., professor of the English language and literature, with rhetoric.

Gerrit J. Kollen, A. M., professor of mathematics, natural philosophy and astronomy.

Henry Boers, A. B., and John H. Kleinkeksel, Jr., A. B., teachers in the preparatory department.

The two faculties (academic and preparatory) were organized under the new constitution. By request of the executive committee, and by mutual arrangement, every required branch of study has been provided for, and the curriculum of the college was never so complete. Valuable help is rendered in biblical instruction, by Rev. D. Van Pelt, and in vocal music by Mr. G. J. Van Hees.

Students, 1879-80.

D class, preparatory	20	
C class, preparatory	23	
B class, preparatory	19	
A class, preparatory	12	
Unclassified and transient	4	
	—	78
Freshmen	12	
Sophomores (one "*Partial*")	16	
Juniors	8	
Seniors (one "*Partial*")	10	
Unclassified	1	
	—	47
Total in the institution		125

Of which number 115 remained throughout the year.

The senior class of ten (10), graduating June 23d, was the largest which so far has left the academic department.

The Library, etc.

Seven hundred and fifty-three bound volumes have been received since our last report, and about the same number of pamphlets. The library now contains nearly 5,000 books.

No important additions have been made to the apparatus or to the cabinet.

The newspaper, De Hope, continues to be published, by an editorial committee of the council, with Prof. C. Doesburg as manager. The circulation has increased.

Prof. G. J. Kollen has taken charge of a class in the theory and practice of teaching. It is hoped that this may become the germ of a normal department.

Examinations.

The examination of the senior class is held on the last Wednesday of April, in each year, and the annual examination of all the undergraduate classes begins on the third Wednesday of June. The next commencement will be on the evening of Wednesday, June 22, 1881.

Finances.

Of the real estate, 140 acres, at Point Superior, and three city lots have been sold. Landed property in this vicinity, has greatly depreciated, and is sold with difficulty. Seventy-five acres are leased for a term of years.

In April, 1879, the "permanent funds" of the institution were found to be $49,419.89, but $8,500 of this amount remained as promissory notes, and $500 were the estimated value of certain railroad bonds, from which nothing may ever be realized. Since then no material change has taken place, and the figures may now be placed in round numbers at $49,500. There is a so-called "Ebenezer fund," which is not held or managed by the council, but the interest of which is paid into our treasury. The amount is over $35,000, mostly in promissory notes, but interest seems to be actually paid on only about $20,000. Hence the total of "productive funds" may be given as $69,500.

In July, 1878, the total of obligations against the college, direct and indirect, was $31,500. In June last it was officially reported to be $25,170.08.

By the help of liberal donations from churches and individuals, the current expenses of the institution for two years have been fully and promptly met, and (as noted above) gratifying reductions have been made in the amount of debt. It is to be hoped that the same liberal spirit may continue, until the college has overcome its difficulties. Rev. Dr. Mandeville continues his valuable services as financial agent in the East.

Receipts and Expenses.

The following exhibit will show the condition of our "contingent fund" for 1879-80:

Receipts.

Cash on hand per last report	$ 91 33
Interest from permanent fund	2,517 07
Interest from Ebenezer fund	1,507 54
Donations for current expenses	3,638 96
Student fees	1,238 00
Other sources	287 08
Total	$9,279 98

Expenditures.

Salaries of professors, etc.	$5,772 81
On account of teachers (old account)	320 50
College expenses	405 76
College expenses (old account)	220 00
Library and reading room	84 30
In payment of former loans	335 00
Interest	1,235 14

Taxes and legal expenses	$329 28
Expenses of treasury	109 93
Balance on hand April, 1880	467 26
Total	$9,279 98

CONCLUSION.

It will be seen that two things are most essential to the success of this institution: the burdensome debt now hanging over it must be removed, and the endowment fund (securely invested and drawing regular interest) must become at least $100,000. To secure these ends the council and the friends of the college are giving earnest endeavors.

The law exempts from taxation the personal estate or invested funds of the chartered educational institutions of this State. The same good policy would dictate that lands given to or held by said institutions for legitimate purposes—that is, for the maintenance of their course of education—should be also exempted. The University, etc., have this privilege, and why not other schools which contribute so much to the public welfare? The undersigned desires to call the attention of our legislators and others to this subject, and can but hope that, within certain just limits, all the property, real and personal, of the colleges of Michigan may alike be favored by the law.

Respectfully submitted,

CHARLES SCOTT,
President.

HOLLAND, Michigan, December 24, 1880.

KALAMAZOO COLLEGE.

REPORT OF THE VISITORS.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—We, the undersigned, members of the committee of State visitors to Kalamazoo college, have had the pleasure of attending some of the class-room work, and also some of the public exercises of commencement week.

From what we heard and saw we conclude that Kalamazoo college is doing a good work. In all their exercises the students gave evidence of having received a good drilling in the class-room, and of having imbibed, at the same time, a desirable moral, and religious spirit. We were convinced that the genial and devoted president and his coádjutors have for their object a *general* training of their students.

It seems to us that Kalamazoo college gives proof that in those institutions of learning, where the classes are small, the students, by a closer contact with their instructors, receive a certain inspiration and moral culture that are often lacking in larger schools, where, perhaps, the advantages for intellectual development are much greater.

But we also found that, like in so many other denominational colleges, the good work is largely carried on at the expense of a few persons most immediately connected with the institution. The college needs and is worthy of a more liberal support than it has yet received. In proportion, as the patrons treat it liberally and generously, will it increase in power.

We were very cordially welcomed at their alumni meeting, at which they very appropriately celebrated the 25th anniversary of the college. The interest felt by the alumni and some of the friends of the college was very effectively and happily shown at this meeting by subscribing quite liberally towards its future support.

Respectfully submitted,

G. J. KOLLEN,
J. W. EWING,
Visitors.

OLIVET COLLEGE.

REPORT OF THE VISITORS.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—Your committee beg leave to present the following report:

It seemed best to us to visit the college during term time, that we might see the institution in its actual every-day workings. We therefore spent three days at Olivet in February, dropping in upon it without any announcement. We then made a thorough examination of the various departments. One of our number was present also at the commencement exercises.

In visiting the different classes, every opportunity was given us to test the knowledge of the students by asking questions, and the readiness with which this questioning was met and answered was a satisfactory proof of good work done by both teachers and scholars. We were greatly pleased to see that the classical students had been thoroughly grounded in the foundations of Greek and Latin grammar. The instruction in mental science was especially gratifying. The students were taught to think for themselves, and seemed enthusiastic in discussing the great problems with which they were concerned. In every department we found thorough, painstaking instruction, which compared well with that given in older and more pretentious institutions.

For the best work in science, especially in chemistry, a laboratory is greatly needed, and we are pleased to learn that one is in process of erection.

We found co-education in successful operation at Olivet. The advantages were evident, while the difficulties seem to have been overcome. Gentlemen and ladies recited in the same classes, ate at the same tables, and did not forget that they were gentlemen and ladies because they were students.

Olivet college proceeds on the pricipal that a *true* education embraces the moral and religious faculties, as well as the strictly intellectual ones. Its influence tends to lead the students up through various truths, unto "*the truth.*" It is distinctively a *Christian* institution.

Your committee found much to commend, little to criticise, a healthful growth in the past, which is the promise of better things in the future.

W. K. SPENCER,
W. J. BAXTER,
Visitors.

MICHIGAN FEMALE SEMINARY.

REPORT OF THE VISITORS.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—The undersigned, members of the committee appointed to visit the Michigan female seminary at Kalamazoo, take pleasure in making the following report:

To a casual observer it might seem that the institution, during the past year, has been less prosperous than in former years, the number of pupils being exceptionally small, (less than fifty) but the annual examinations bear ample testimony to the thorough work done, both by the admirable corps of teachers and by the pupils. We attended classes in astronomy, algebra, Latin, physiology and rhetoric, and where all was so satisfactory it seems unnecessary to specify peculiar excellencies on the part of any. Many of the pupils evinced a grasp of the subject in hand, and a maturity of thought, most gratifying. There were but four graduates, yet they made a class of which their *alma mater* has no need to be ashamed. Music, French, and painting are taught as extras. It seems to us a mistake, in such a school, that there is no regular course in music laid down. It would render the work of the teacher far less perplexing, and give a stimulus to those who study it with an aim to become proficients.

The Christian home influence of the school life, ought not to pass without mention. It is seldom we see in a school so careful an oversight of the comfort and welfare of its inmates. From its foundation the seminary has labored under most perplexing and discouraging financial embarrassments, but thanks to the patient and devoted efforts of its long tried friends, working with a faith that is surety of success, these are now nearly removed, and the prayers and toil of its supporters seem to have blossomed into bright promise of future prosperity. Should the school receive that patronage in the future, which its fine location and surroundings, and its excellent advantages richly deserve, the report of another year must bring you tidings of a still greater work accomplished for the mental, moral, and physical development of our precious Michigan girls.

Respectfully submitted,
MRS. L. R. DIBBLE,
MRS. H. N. FRENCH,
Visitors.

MICHIGAN MILITARY ACADEMY.

REPORT OF THE SUPERINTENDENT.

HON. C. A. GOWER,
Superintendent of Public Instruction:

SIR:—In accordance with the provisions of Sec. 3788, compiled laws of 1871, I have the honor to transmit my report for the year ending June 15, 1880:

OFFICERS OF THE BOARD OF TRUSTEES.

Hon. Henry W. Lord, president; General S. S. Mathews, secretary; Henry C. Wisner, treasurer.

FACULTY.

Superintendent, Colonel J. S. Rogers, M. S. T., late U. S. Army; assistant superintendent, Captain R. Catlin, U. S. Army, LL. B.

Academic Staff—W. H. Butts, M. A., mathematics and Greek; H. J. Rice, M. S., natural and intellectual sciences; Lieut. George R. Cecil, U. S. Army, civil and military engineering—military science and tactics; C. G. Müller, M. A., modern languages and Latin; F. E. Clark, B. A., history, English literature and book-keeping; W. H. Scott, B. A., mathematics and English.

Military Staff—Major Geo. R. Cecil, M. S. T., Lieut. 13th Infantry, U. S. Army, adjutant; Captain R. Catlin, U. S. Army, quartermaster; Maj. Galbraith, M. S. T., surgeon.

CHAPLAINS.

Rev. T. J. Brooke, (Episcopalian); Rev. J. M. Gelston, (Presbyterian); Rev. Thomas Stalker, (Methodist); Rev. A. E. Berry, (Congregationalist).

ENROLLMENT, ETC.

Ninety-seven cadets were entered during the year, representing ten States and the District of Columbia:

Classical course	5
Scientific "	14
Select "	22
English "	34
Preparatory department	22

Graduating class numbered six—all in the scientific course. Since the organization of the academy, three years ago, we have graduated fourteen cadets, six in the classical and eight in the scientific course. The classical graduates are now all in attendance at the university.

GYMNASIUM.

A new, capacious gymnasium building has been erected during the year, and thoroughly equipped for all varieties of physical training.

The excellent health uniformly maintained by the cadets of this academy is attributed to their regular habits, and to the regular physical exercise required of them daily. In my next report I shall be able to furnish you with statistics, showing accurately the result of our system of physical training.

I am very respectfully, your obedient servant,

J. S. ROGERS,
Superintendent.

ORCHARD LAKE, December 7, 1880.

DECISIONS

OF THE

SUPREME COURT OF MICHIGAN

OF INTEREST TO

SCHOOL DISTRICTS.

FILED DURING 1880.

DECISIONS OF THE SUPREME COURT.

I.

Liability of School Districts for Teachers' Wages During Certain Periods of Suspension of School.

Franklin S. Dewey *v.* Union School District of the city of Alpena; case from Alpena, June term, 1880.

Graves, Justice:

The plaintiff was regularly hired by the district to serve as teacher in the public schools for ten months for $130 per month. He entered on his duties September 2d, and continued up to December 10th, at which time the district officers closed the schools, on account of the prevalence of small-pox in the city, and kept them closed thereafter for the same reason until March 17th. They were then re-opened, and the plaintiff renewed his duties. He was subsequently hired for the next school year and his compensation was increased $100. The district refused to pay him for the period of suspension, and he brought this action to recover it.

The claim was resisted on two grounds: *First,* that in the second hiring it was mutually agreed that the addition of $100 to his compensation for incoming service should stand and be allowed and accepted in full satisfaction of all claims for pay during the time in question. *Second,* that the suspension was the effect of an overruling necessity, or in other words, the act of God, and that all parts of the contract were suspended for the time being.

The circuit judge submitted to the jury both questions in a very clear manner, and instructed them to find against the plaintiff, in case they were satisfied the alleged contract was in fact entered into; or, in case they should find that the small-pox was so prevalent that it became obligatory on the board to close the schools as a necessary step to prevent the spread of the disease and save human life.

The jury returned a verdict in favor of the district. But we cannot know with legal certainty whether they determined only one of these questions in favor of the district, or whether they so determined both; and of course if one only was so decided, it is impossible to say which one. The evidence on the compromise was conflicting, and, as it appears on the record, the advantage was with the plaintiff. Still, if no other ground of defense had been laid, the verdict must have been conclusive. As just explained, it is not so now.

The second objection must be briefly considered. Beyond controversy, the closing of the schools was a wise and timely expedient. But the defense inter-

posed could not rest on that. It must appear that observance of the contract by the district was caused to be impossible by act of God. It is not enough that great difficulties were encountered, or that there existed urgent and satisfactory reasons for stopping the schools. This is all the evidence tended to show. The contract between the parties was positive and for lawful objects. On one side school buildings and pupils were to be provided, and on the other, personal service as teacher. The plaintiff continued ready to perform, but the district refused to open its school houses and allow the attendance of pupils, and it thereby prevented performance by the plaintiff.

Admitting that the circumstances justified the officers, there is yet no rule of justice which will entitle the district to visit its own misfortunes upon the plaintiff. He was not at fault. He had no agency in bringing about the state of things which rendered it eminently prudent to dismiss the schools. It was the misfortune of the district, and the district and not the plaintiff ought to bear it. The occasion which was presented to the district was not within the principle contended for. It was not one of absolute necessity, but of strong expediency.

To let in the defense that the suspension precluded recovery, the agreement must have provided for it. But the district did not stipulate for the right to discontinue the plaintiff's pay upon the judgment of the officers, however discreet and fair, that a stoppage of the schools is found a needful measure to prevent their invasion by disease, or to stay or oppose its spread or progress in the community; and the contract cannot be regarded as tacitly subject to such a condition,

The judgment must be reversed with costs and a new trial granted.

(The other justices concurred.)

II.

Validity of Contracts Made with Teachers in Graded School Districts Previous to the Annual Meetings of such Districts.

Clarence Q. Tappan *v.* School District No. 1, of the township of Carrolton; case from Saginaw, October term, 1880.

Graves, Justice:

August 31, 1878, the defendant's trustees entered into a written contract with Tappan to hire him to teach the defendant's school for the term of 40 weeks, beginning on the first day of the school year, September 2d, at $50 per month and board himself. The school was organized as a graded one in 1873, and so remained. He began teaching under the contract on the second of September and continued two days. He was then dismissed by defendant's trustees, but no cause was expressed. September 24, 1879, he brought this action for damages. The circuit judge heard the case upon the facts and refused to allow a recovery.

It is said that the trustees who contracted with Tappan were not empowered to hire for any time beyond the current school year, to expire on the arrival of the annual meeting, September 2d, and that the contract so made on the thirty-first of August was not binding on the district after September 1st. The view taken is that the statutes mean that either the voters of the district or the board shall have full power to control the school during the whole school

year beginning on the first Monday of September, and exclusive of any hindrance or interference from contracts made previously; and reference is made to the authority of hiring teachers conferred by sections 3616 and 3604, as amended in 1875 (Pub. Acts 1875, pp. 281–282,) and section 3605.

Section 3616 provides for hiring teachers under the general law regulating primary schools, and section 3604 provides what may be done and transacted at annual meetings, and declares among other things that the qualified voters shall determine whether the school shall be kept "by male or female teachers, or both," during the "ensuing year," and section 3605 provides that in case that is not determined at such meeting the board shall be empowered to determine it.

These provisions, it is contended, can only have room to operate according to the intent, by leaving the selection of teachers, during each school year, to the exclusive control of the board for that year, except in so far as the annual meeting exercises lawful discretion.

There is much force in this reasoning, but whether it is sound or not when confined to those primary schools which are not subject to the specific provisions intended for graded and high schools it is not needful to discuss, because the essential provisions on which it proceeds, so far as the present case is concerned, are not applicable to graded schools like the defendant's. The hiring of teachers for these schools is not left to the statute. It is taken out of it and specially provided for by a distinct provision. By section 3744 the trustees of graded schools are empowered to employ all teachers necessary, and what teachers are necessary is left to be decided by their sound discretion.

The context and general purview equally require this construction and the general cause of the regulation is repugnant to the notion that the voters at annual meetings may decide what kind of teachers shall be employed.

In the case of graded schools the trustees are not annually renewed. The legislature has seen fit to give the board more permanence. One-third only or two out of six go out yearly. A purpose to secure an administration for these branches more staple and efficient in the interest of education than is very common under the general law, is plain enough, and there is no implication of a design that the power of the board should be so fettered that no teaching to commence on the first day of the school year could be lawfully contracted for until the annual meeting on that day should be closed. On the contrary it may be fairly argued that the legislature contemplated that these schools would generally open on the beginning of the school year and that the teachers would have to be contracted with in season therefor, and that some time would be necessary to enable the trustees to perform with due care the important duty of selecting and hiring. It is scarcely necessary to enlarge upon the question. The contract appears to have been within the power of the trustees and the record discloses nothing to impeach it. Neither the trustees nor the voters at the annual meeting had power to impair its obligation. Whether they resolved or not that none but female teachers should be employed is not important.

The finding contains no basis for a judgment here and therefore it becomes necessary to reverse the judgment and order a new trial, the plaintiff in error recovering his costs of this court.

(The other justices concurred.)

TRANSACTIONS

OF THE

MICHIGAN STATE TEACHERS' ASSOCIATION

AT THE

THIRTIETH ANNUAL MEETING,

Held at Lansing, Dec. 28, 29, and 30, 1880.

STATE TEACHERS' ASSOCIATION.

TRANSACTIONS OF THE THIRTIETH* ANNUAL MEETING.

Lansing, Tuesday Evening, December 28, 1880.

OPENING SESSION.

The association assembled at Representative hall, and at 8 o'clock was called to order by the president, C. B. Thomas.

After the singing of a selection entitled "Memories," by a quartette consisting of Profs. F. H. Pease, Austin George, and Misses Emma Barr and Ella Joslin, the president, in a few appropriate words of welcome, introduced to the audience the speaker of the evening, Dr. Malcolm MacVicar, the recently elected principal of the State normal school. The subject of his lecture was, "The Teacher and his Work." The session was closed with the singing of a chorus entitled, "Hark! The Curfew."

Wednesday, December 29, 1880.

MORNING SESSION.

The association was called to order by the president and Prof. D. Putnam conducted the devotional exercises.

After making some preliminary announcements, the president gave an address upon "The Association and the Educational Interests of the State."

I. M. Wellington in a short speech endorsed the views expressed in the paper. He was followed in discussion by E. P. Church, who moved that the sugges-

*By some mistake the annual meetings of 1878 and 1879 were named as the "Twenty-seventh" and "Twenty-eighth" respectively; whereas, the historical records of the association show them to have been the twenty-eighth and twenty-ninth annual meetings, and consequently the present is the thirtieth annual meeting.

tions in the president's address be referred for consideration to the committee on resolutions. Carried.

Hon. Geo. Robertson next addressed the association in the interests of temperance.

C. A. Cook presented a paper, "The Proper Sphere of the Village High School." The discussion of this subject was participated in by Z. C. Spencer, O. D. Thompson, J. M. B. Sill, and E. M. Wheeler.

The discussion on "Text-books versus Better Methods in the School Room" was by I. M. Wellington. He was followed by Messrs. C. F. R. Bellows, W. E. Bellows, J. G. Plowman, Austin George, and Dr. M. MacVicar.

Afternoon Session.

Miss Ruth Hoppin, of the State normal school, read an essay on "Methods in History."

Miss M. Louise Jones, of Charlotte, read a paper in discussion of the same subject.

At this stage of the proceedings Hon. David H. Jerome, of Saginaw, governor-elect of the State, was invited to address the assembly. He responded in a happy speech, which was received with applause by those present.

The next paper upon "The Place of Technical Grammar in the Schools of To-day" was read by Prof. I. N. Demmon.

J. M. B. Sill opened the discussion.

A song, entitled "Moods and Tenses," composed by Prof. Pease was then sung by a choir led by Deputy Superintendent W. L. Smith.

The president appointed the following committees:

On nominations—Messrs. C. F. R. Bellows, Z. C. Spencer, H. N. French, T. C. Garner, and Miss. M. Louise Jones; on resolutions—I. M. Wellington, E. B. Fairfield, Jr., Mrs. W. A. Fallass, I. W. Morley, and P. A. Latta.

Hon. C. A. Gower, chairman of the committee on "Needed Legislation," appointed at the last meeting of the association, presented the following points for consideration:

1. Kind and amount of supervision desirable for the country schools.
2. What extent of territory should constitute the unit for purposes of supervision—township, county, or representative district?
3. Who shall examine teachers,—a board or an individual?
4. Who should superintend,—one man or a board?
5. Should the examining and supervising power be the same?
6. Method of selecting examiners and superintendents,—should it be by election or appointment?
7. The township and district libraries,—what legislation is needed in their behalf?
8. Relation of the department of public instruction to the State educational institutions.

The first topic was discussed by J. M. B. Sill; the second by Messrs. Austin George, T. S. Clark, Z. Truesdel and President L. R. Fiske. The president of the association also read a series of resolutions passed by the Genesee county teachers' association, relative to the subject under discussion. The third topic was discussed by Messrs. Z. Truesdel, E. P. Church, C. F. R. Bellows, Austin George, and P. A. Latta; the fourth by W. S. Perry.

At this point a motion was made and carried that the discussion of the re-

maining topics be postponed till Thursday morning, and that the discussions upon the papers, "The New Botany" and "Primary Errors" be omitted.

EVENING SESSION.

The association assembled in the opera house at 8 o'clock.

After the singing of a solo by Miss E. Joslin, the audience listened to an illustrated lecture on the Yellowstone national park, entitled "An Evening in Wonderland," by William I. Marshall, Fitchburg, Mass.

Thursday, December 30, 1880.

MORNING SESSION.

The president called the association to order at 8:30. The devotional exercises were led by Prof. J. Estabrook.

The discussion upon "Needed Legislation" was resumed. The fourth topic was further discussed by Prof. D. Putnam and Dr. M. MacVicar. The fifth topic was discussed by Prof. H. King; the sixth by J. A. Corbin; the seventh by C. A. Gower and Z. Truesdel. Prof. W. H. Payne spoke upon the last topic.

A motion was then made and carried as follows:

Resolved, That we, the members of the State teachers' association, have full confidence in the ability of the committee on legislation to draft a bill that will best meet with the requirements of the State, and that we will heartily endorse and sustain the measures that they judge best to bring before our State legislature.

Prof. W. J. Beal read the next paper, "The New Botany," after which W. N. Hailmann read a paper entitled "Primary Errors."

On motion of Prof. A. George it was resolved that a sufficient number of pamphlet copies of the proceedings be printed to supply one copy to each member of the association.

On motion made and seconded, the duties of a committee on necrology were referred to the committee on resolutions.

Prof. W. H. Payne opened the discussion on "To what extent do the Strictures of Mr. Charles Francis Adams, in the November number of Harper's Monthly, apply to Michigan Superintendents?"

Messrs. W. S. Perry and C. A. Sanford also spoke upon the same subject.

AFTERNOON SESSION.

After the association had been called to order, C. F. R. Bellows, the chairman of the committee on nominations made a report, which was received, and the following named persons were duly elected:

President—Austin George, Ypsilanti.
First Vice President—I. M. Wellington, Detroit.
Second Vice President—M. T. Gass, Flint.
Secretary—O. D. Thompson, Romeo.
Treasurer—Z. Truesdel, Pontiac.
Executive Committee—For one year, W. J. Beal, Lansing; C. R. Miller,

Ida E. Ellis, Detroit.
Joseph Estabrook, Olivet.
Mrs. E. B. Fairfield, Jr., Tecumseh.
E. B. Fairfield, Jr., Tecumseh.
Mrs. Carrie Faxon, West Bay City.
W. A. Fallas, Cedar Springs.
S. C. Ferguson, Howard City.
Nellie B. Field, Kalamazoo.
Addie M. Finck, Hanover.
E. M. Fisher, Bridgeport.
Mary Felker, Essexville.
Ira L. Forbes, Brighton.
Henry N. French, Kalamazoo.
T. C. Garner, Big Rapids.
H. R. Gass, Jonesville.
M. T. Gass, Flint.
Austin George, Ypsilanti.
J. B. Glasgow, Jackson.
C. A. Gower, Lansing.
Anna S. Griswold, Charlotte.
L. G. Gorton, Detroit.
C. B. Hall, Hastings.
C. W. Heywood, Hartford.
Geo. Hempel, Saginaw.
Jennie K. Hill, Howell.
Mrs. M. W. Hoag, Tecumseh.
E. Hudson, Lansing.
Geo. B. Holmes, Hubbardston.
Ruth Hoppin, Ypsilanti.
Ella J. Howett, Gilead.
C. L. Houseman, Muskegon.
Mary E. Holland, Linden.
D. Howell, Three Rivers.
Albert Jennings, Schoolcraft.
J. F. Jordan, Buchanan.
Anna M. Joyce, Detroit.
M. L. Jones, Charlotte.
Ella Joslyn, Ypsilanti.
Samuel Johnson, Lansing.
H. King, Olivet.
C. G. Kingman, Corunna.
P. A. Latta, Allegan.
H. J. Leggett, Lisbon.
Mary Lennon, Muskegon.
Carl Lentwein, Niles.
A. Lodeman, Ypsilanti.
J. M. Manning, Byron.
James H. McFarlan, Fentonville.
Malcolm MacVicar, Ypsilanti.
J. George MacVicar, Ypsilanti.
Lewis McLouth, Ypsilanti.
J. R. Miller, Constantine.
I. W. Morley, Bay City.
Mary A. Mossie, Newaygo.
J. E. Mowatt, Fallasburg.
Maria McDonald, Oxford.
Mrs. Helen A. Miller, Chelsea.
L. W. Mills, Ypsilanti.
Lois McMahon, Jonesville.
Ella M. Nothaway, Ovid.
Dustin C. Oakes, Lyons.
Mary N. Owen, Lowell.
M. D. Ormes, Capac.
W. M. Osband, Ypsilanti.
Oliver G. Owen, Lapeer.
W. H. Payne, Ann Arbor.
Henry R. Pattengill, Ithaca.
Frank Peavey, Detroit.
W. S. Perry, Ann Arbor.
Daniel Putnam, Ypsilanti.
J. G. Plowman, White Pigeon.
A. Persing, Battle Creek.
E. E. Perry, Lansing.
F. H. Pease, Ypsilanti.
E. M. Plunkett, Sanilac.
C. M. Ranger, Elk Rapids.
Cora E. Rexford, Napoleon.
N. A. Richards, St. Louis.
George Robertson, Albion.
Jas. A. Sadler, Stanton.
Wm. H. Scott, Orchard Lake.
L. F. Selfridge, Jackson.
J. D. Shiller, Jackson.
J. H. Scott, Brighton.
W. L. Smith, Lansing.
J. M. B. Sill, Detroit.
D. B. Simmons, Mason.
Alice M. Smith, Greenville.
J. W. Smith, Monroe.
Cyrus Smith, Jackson.
Z. C. Spencer, Battle Creek.
Clark Stanton, Holly.
Frances A. St. John, Reading.
E. A. Strong, Grand Rapids.
Jas. A. St. Clair, Morenci.
C. B. Thomas, Saginaw.
O. D. Thompson, Romeo.
Mary G. Thompson, Kensington.
Dean Tivy, Auburn.
Z. Truesdel, Pontiac.
Jas. Troop, Matherton.
Nellie Walker, East Saginaw.
N. H. Walbridge, Newaygo.
Wm. E. Watt, Grand Rapids.
E. L. Walter, Ann Arbor.
Geo. S. White, Jackson.
Rubie White, Ovid.
Isaac M. Wellington, Detroit.
W. S. Webster, Ovid.
Belle Widner, Wyandotte.
Emma D. Webster, Ovid.
W. W. Wendell, Hudson.
Alice S. Wimple, Tecumseh.
W. H. S. Wood, Ortonville.
F. O. Wickham, Sheridan.
Ida Wood, Charlotte.

LECTURE.

AN EVENING IN WONDERLAND; or, THE YELLOWSTONE NATIONAL PARK.

BY WILLIAM I. MARSHALL.

Maps of the United States, prepared since 1872, show in the northwest corner of Wyoming Territory, and stretching a little over into Idaho and Montana, a rectangular plat marked Yellowstone National Park. On the maps of an ordinary school geography it appears scarcely larger than one's thumb nail, but that is only because we own so much land "out west" that we cannot spare a great space on a map, even for a large region; for this which seems so small is sixty-five miles long by fifty-five miles wide, covering more than two and a quarter million acres, or an area a little larger than 99 townships in Michigan, or an area so large that we might cut off from one end of our park a section as large as the whole State of Delaware, and from the other end another section as large as the whole State of Rhode Island and then have left, between the two, a strip through the middle of the park three miles wide and sixty-five miles long.

Here nature has assembled, as if for the very purposes to which our national government has wisely devoted the region, such profusion of her rarest wonders, manifesting such marvelous phenomena of geysers, solfataras, fumaroles, and mud volcanoes, amid such sublime and picturesque scenery of lakes, mountains, rivers, valleys, cañons, cataracts, cascades, cliffs of obsidian, petrified forests, and curiously eroded and brilliantly colored rocks, that its early explorers gave it the name of Wonderland, a title which all who have visited it deem very appropriate. It is on both sides—but mostly on the east side—of the main range of the Rocky Mountains, a little of the southwest corner of the park draining into the Pacific through the Snake River, the great southerly branch of the Columbia or Oregon, which no longer

> "Hears no sound
> Save its own dashings,"

since the steamer's paddles now vex its waters, the roar of the railroad train echoes along its Dalles and the hum of varied industry rises from its fertile valleys. All the rest of the park drains through the Madison and Gallatin (which are the middle and eastern of the three streams which unite to form the Missouri river) and through the Yellowstone, which is the greatest tributary of the upper part of the Missouri, and is longer than the Ohio or the Rhine. As it is situated between 44° and 45° N. Lat., its valleys ranging from 6,000 to 8,000 feet above the sea level, and the mountains which separate and guard them rising to from 8,500 to 12,000 feet above the sea, the park is too

cold for farming, though, except along the rocky summits of the loftier mountains, and for a short distance immediately about the hot springs, solfataras, fumaroles and salses, there is generally a fertile soil, well timbered with pines, spruces, firs and other conifers, or covered with excellent and most nutritious grasses. Being a volcanic region (except in its northeast corner where there are a few silver mines) it contains no metals or minerals of commercial value but sulphur, which it will not pay to freight out of that region for many years to come if ever, as very extensive sulphur deposits exist much nearer the line of the Union Pacific railway, near Evanston, Wyoming Territory.

Into the interesting story of its discovery and exploration I have not time to enter at any length to-night. So far as known, but three white men—John Colter, James Bridger and Robert Muldrum had ever seen it before 1863, when gold miners from Montana began to stray into it in search for new mines. Colter was one of the hunters of Lewis & Clarke's party sent out by President Jefferson in 1804, to explore the Missouri, and to cross the Rocky Mountains and descend the Columbia to the Pacific. On the return of the party, in 1806, Colter was honorably discharged and remained to hunt on the head waters of the Missouri. His fearfully thrilling adventure with a party of Blackfeet Indians is related by Irving in "Astoria." Undismayed by that narrow escape from death, he again outfitted and returned to the region about Henry Lake, a little northwest of the park, and lived for a time among the Bannock Indians, and about 1810, floated in a canoe some 3,000 miles down the Missouri river, to the then extreme frontier territory of Missouri, and told of sights and scenes in the Rocky Mountains along the upper Yellowstone, Madison, and Snake rivers which we now know to be even far more wonderful than he reported them, but which for more than half a century few people believed to have any existence, outside of Colter's imagination. This general incredulity was strengthened by the successive failures of various parties to find these wonders, which was owing to the fact that these parties tried to enter the region from the south or east, instead of from the west or north, and were baffled and forced to turn out of their course by the very lofty and rugged Sierra Shoshone, or Wind River mountains, across which no way was ever found till Capt. Jones' party in 1873 discovered Togwotee Pass, and demonstrated that the range was not, as had been supposed, utterly impassable. But as Togwotee Pass is 9,621 feet above the sea, while the passes and cañons on the west and north sides of the park enable us to enter it at elevations varying from 6,000 to 7,000 feet above the sea, it is evident that the natural routes into the park must always be from the north and west, following up the valleys of the Yellowstone, the Madison, and the Snake rivers; so that though nearly all the park is within the territory of Wyoming, most of the travel to it will always go through Montana, or if not through Montana, at least to the southwest corner of that territory, where, out of the northwest corner of the park, the Madison pours its crystal waters through the magnificent gateway of its middle cañon, whose grandeur is a most fitting portal to the countless wonders of the park. The first account of the wonders of the park, it is claimed, was published in 1867, in the Frontier Index (then issued at Ft. Kearney, Neb.). Few people, however, ever saw or heard of this, and the first accounts which attracted any considerable attention were printed in Montana newspapers in the autumn of 1870, and the winter of 1870–71, and in "Scribner's Monthly" and the "Overland" in the spring of 1871. These excited so much interest that the U. S. Geological Survey, under Prof. F. V. Hayden, visited the region in the summers of 1871 and 1872, and their first report caused congress, by

unanimous vote of both houses, by an act approved March 1, 1872, "to withdraw from sale and set apart as a national park, or perpetual public pleasure ground," the area before mentioned, its boundaries being so fixed as to include the chief wonders of the region; so that we are assured of the permanent possession of this largest and most wonderful park that the world has ever known, free of all those petty exactions and vexatious impositions from private ownership which so greatly mar one's enjoyment of Niagara and many other pleasure resorts.

The National Park should not be confounded with the North, South, San Luis, Middle and other smaller parks of Colorado, which are strictly *natural* divisions of land, being more or less extensive basins of level or undulating land, walled in by lofty mountain rims, and, doubtless, the beds of ancient lakes. Such basins are common in the Rocky Mountains, and the National Park contains several of them, the most notable being the basin of the Upper Madison between its second and third cañons, and the basin of the Upper Yellowstone above its grand cañon. Interesting, geologically, and charming, scenically, as are the Colorado parks, no one or all of them together contain any such unique and marvelous scenes as the National Park, and they can no more rival it than a mill-dam can Niagara. The chief wonders of the park are:

1st. The upper and lower geyser basins of the Fire Hole or Madison river, the Shoshone Lake geyser basin, and various smaller geyser basins scattered through the park, containing scores of geysers, spouting at various intervals crystal clear, boiling hot water in columns, varying with the size of their orifices from a few inches to twenty feet in diameter, to heights all the way from 8 or 10 to 250 or 275 feet, the eruptions being accompanied by constant subterranean thunderings like a mighty artillery duel, or from thirty to seventy shots a minute, each explosion jarring the ground with a miniature earthquake and pulsating up the column, shivering it upward and outwards in jets of silvery spray, while vast banks and lofty pillars of steam, crowned and fringed with rainbows, and swaying in the wind, and assuming countless fantastic forms, add to the weird beauty and surpassing grandeur of the spectacle. No geyser spouts constantly, though some small ones are in erruption most of the time. The duration of the erruptions varies as much as the height and size of the columns, ranging all the way from three or four minutes to as many hours, and sometimes even to 9 hours, and their frequency also varies, Old Faithful spouting every sixty-five minutes for from four to six minutes, sending up a column 7 feet by 2 feet, to heights ranging from 125 to 175 feet, while the other large ones spout at irregular intervals varying all the way from two or three hours to as many days or even weeks. No other geyser in the world except Old Faithful is known to spout regularly and so frequently. The best idea one can form of a geyser eruption without seeing one, is to think of a cataract rushing up to constantly varying heights and in ever changing shapes; for there is the same shivering upwards and outwards into rockets of milk-white spray in the geyser column, that one sees in the fall of a lofty cataract, only the varying forces of the explosions constantly vary the height and shape of the column, so that there are no two half-seconds that it presents the same appearance. The theory of geyser eruptions will be found fully stated in Tyndall's "Heat as a Mode of Motion," in "Le Comte's Geology," and in the new edition of the "New American Encyclopedia," and in "Johnson's Encyclopedia," article, "geysers." Besides the geysers there are in these geyser basins several thousand boiling, and pulsating, and quiet hot

springs of varying temperature up to the boiling point, and of all sizes up to pools a hundred yards across, which pour out brooks of hot water, and also many hot mud springs. The craters and basins of many of these springs and geysers are among the loveliest objects in nature, the silica which is carried in solution by their waters depositing by evaporation in forms of indescribable beauty, building up around each spring or geyser a mound, often of immense extent, part of them snowy white and part of them painted with a great variety of the most gorgeous and the most delicate colors, by the various minerals in solution in the water. One crater, that of the Grotte geyser, 120 feet in circumference and 8 feet high, viewed from a distance looks like a mass of snow white coral, but approaching nearer it seems set with a million pearls; another called the Castle because it resembles from a distance the ruins of a great white marble castle, viewed close at hand presents the most curious resemblances to great masses of snow white cauliflower turned to rock, or to brain coral, or to half-opened buds, or to flowers, or leaves, or to frost work, or to bead work, or delicate embroidery, or to carvings in ivory, or to patterns of rare old lace, but all done in rock by the rippling and splashing of the water as it falls from the great column and runs down the slope. In most of these springs when shallow the water is so perfectly transparent that it seems impossible that these vast masses of rock should be deposited from it, and where deep is of such a beautiful deep blue that one readily echoes the declaration of the famous German scientist, Bunsen, who said of similar springs in the geyser basin of Iceland, "Their beauty is indescribable." In many of the springs that are not very hot low forms of life abound, while in many of the hotter ones the interior ornamentation bears the most curious resemblances to animal and vegetable life. On every hand is grandeur, beauty, and mystery. These geysers are much more beautiful in structure and far grander in their eruptions than those of Iceland, exceed in number all known in the world outside our park, and are the only true geysers known in America, as the *so-called* geysers of California are merely a little cluster of hot springs, solfataras and fumaroles, (such as one sees on a much grander scale at twenty places in the National Park,) and are not geysers at all, and no more resemble geysers than a tea kettle resembles a locomotive.

2d. The solfataras, fumaroles, and salses or mud volcanoes, which from thousands of openings pour out sulphurous steam or hot water, with much noise of hissing and boiling, or spout mud, thin as mush or thick as hasty pudding, sometimes as much as 275 feet high with all the phenomena of noise and steam and jarring of the ground which accompany geyser eruptions.

3d. The Yellowstone lake, which, though almost on top of the Rocky Mountains, at an altitude of 7,780 feet above the sea, is large enough to float all the navies of the world, covering 300 square miles with the clearest and coldest of water. It has a shore line of 175 miles, is in places 300 feet deep, contains several beautiful islands, has on its shores numerous clusters of hot springs, mud springs and small geysers, is surrounded by grand mountains abounding with game, and its waters swarm with trout and are the summer home of countless swans, geese, ducks, pelicans, cranes and other water fowl. At one place a little way out in the cold water of the lake, a hot spring has built up a rocky cone by the same process of depositing the mineral held in solution in its waters as in the case of those described in the geyser basins, so that one may stand on the crater of the spring, and catch trout out of the cold water of the lake and without moving out of his tracks, turn round and boil them in the spring.

4th. The Yellowstone Falls and Grand Cañon. The two falls, the upper 140, and the lower 397 feet high, are a little less than a half mile apart, and midway between them Cascade Creek leaps into the river from the west side down the picturesque crystal cascades 129 feet high. These falls and cascades are at the head of the grand cañon, a gorge about 25 miles long, with walls from 1,000 to 2,500 or 3,000 feet high, cut through volcanic rock which has weathered into countless quaint forms, and which, from the water's edge to the top are a dazzling, bewildering maze of the most brilliant and gorgeous colors. Here are hundreds of acres of yellows from gold to pale straw, and of reds from carmine to pink, all intermingled with white, and brown, and black, and gray, and russet, and buff, and cream, and olive. There is no approach to stratification of rock nor to regular arrangement of colors, but all the glories of the autumn woods, and all the splendors of the sunrise and the sunset are fixed in these wondrous cliffs, and made as eternal as the everlasting mountains. It is the one utterly unequaled and indescribably glorious stretch of rock scenery, whose boundless wealth of vivid and varied color one can never expect to see elsewhere on earth.

5th. The fall, cascades, and curiously eroded rocks of Tower Creek, which, near the foot of the grand cañon, out from among jagged pinnacles of almost black, amygdaloidal lava, leaps down 156 feet, making a most unique cataract. The stream receives its name from the tower like forms into which the cliffs have weathered. Two hundred yards below the foot of the fall the stream pours into the Yellowstone, and opposite its mouth, high up on the east wall of the grand cañon, there is a fine exposure of basaltic columns, like those of the Giant's Causeway and Fingal's Cave.

6th. The mammoth hot springs of Gardiner's river. These springs are not siliceous, like those of the geyser basins, but calcareous, and on the steep slopes of White Mountain have deposited their calcic carbonate and built up a series of terraced basins, most brilliantly colored without and within, and ornamented with countless beautiful forms of rock deposit like coral, or bead work, or the corrugated surfaces of shells, or half-opened flowers, or leaves, or frost work, so that by many these are considered as more beautiful even than the geyser basin hot springs. The only other similar cluster of springs known in the world is in the northern island of New Zealand.

Besides these peculiar and phenomenal wonders there are countless others, such as abound along all great continental divides, whence spring the sources of mighty rivers; and over all the dry, pure air of the Rocky Mountains, redolent with the health giving balsamic odors of pine, spruce, and fir, air which makes life a delight, and thrills the pulses with a new sense of the pleasure of healthy existence.

The proper time to visit the park is from June to October, by preference of all the year from August 15th to October 15th, as not only is the weather then the most delightful, but the hunting is much better than earlier in the season.

Up to 1880 several hundred miles of stage-coach riding were required to reach the park, but since then it has been easier of access than is the Yosemite Valley, as the Utah & Northern railroad, leaving the Union & Central Pacific at Ogden, Utah, and passing nearly parallel to the western boundary of the park and less than 80 miles from it, was, in March, 1880, built across the boundary line between Idaho and Montana, and has since been rapidly extended through the fertile valleys and to the rich mining camps of Montana, bringing to that immense territory, (which is more than two and a half times as large as Michigan) last of all our territories except Alaska, the inestimable advan-

tages of a railroad, so necessary to the proper development of its rich mines of gold, and silver, and copper, and lead, and iron, and coal, its millions of acres of fertile arable lands, and its much greater area of the very best of grasing land.

The range of mountains running east and west across the park, through which the Yellowstone river has cut its grand cañon, is so lofty and steep that no railroad is likely ever to be built to the central portion of the park, to Yellowstone falls, Yellowstone lake, and the geyser basins,—from the north, the routes from the west and southwest sides, up the valleys of the Snake and the Madison rivers furnishing the only economically practicable grades for a railroad to any considerable distance into the park.

Our best route to the park will be by the Union Pacific railway to Ogden, Utah, thence by the Utah & Northern railroad to the most convenient point, (now January, 1881,) at its terminus, Dillon, Montana, and thence by stage, wagon, or horseback through the park. Going thus, we shall see much of the most remarkable scenery of the Rocky Mountain region, traveling for more than 900 miles through the mountains before reaching Dillon, riding for 450 miles together at an altitude never lower than 6,000 feet, and ranging from that up to 8,242 feet above the sea, crossing the main range of the Rocky Mountains twice, passing for two-score miles along the borders of the great Salt Lake, and for a much greater distance at the base of the Wahsatch Mountains, one of the grandest and most interesting of the Rocky Mountain ranges, traversing the famous Laramie plains, gliding down the Echo, and Weber, and Porte Neuf cañons, crossing the Bear and Snake rivers, and following the valleys of both streams for many miles, and being within easy distances for side trips, to the sublime scenery and the interesting mining regions of Colorado and Utah, and the grand Shoshone fall of the Snake river in Idaho. Everywhere we shall notice how sparse are the forests of the Rocky Mountains, and how few the varieties of trees compared with our country east and north of the prairie region. There are a *very* few scrub oaks (worthless for timber) in some of the cañons of Colorado and Utah, but except these no oaks, nor beech, nor birch, nor chestnut, nor hickory, nor black walnut, nor elm, nor basswood, nor ash, nor cherry, nor any other deciduous trees except poplar and cottonwood, and those not as extensive forests but only as narrow fringes along the margins of the streams, or as groves on islands, or in bends of the rivers, or around springs and marshy spots in the mountains. The valleys and lower slopes of the mountains are a sea of grass interspersed with more or less wild sage-brush, (the wormwood of the early explorers) and much cactus, and adorned with endless profusion of beautiful wild flowers.

The forests are entirely of evergreen, cone-bearing trees, mostly pines, spruces, and firs, so that the forest scenery is much less varied than among the various ranges of the Appalachian Mountain system. The Rocky Mountain forests rarely begin lower than 5,000 to 6,000 feet above the sea level, and are far from continuous on the mountains above those heights to the upper limit of timber, not more than ten per cent of the whole country being timbered. This absence of forests in the valleys, and their non-continuity on the mountains has contributed much to the speedy exploration and rapid settlement of the Rocky Mountains. Often, for scores and hundreds of miles there is nothing to hinder driving a wagon, with no labor in road making except occasionally a few hours' or possibly now and then a few days' work in grading down some uncommonly steep ravine, not a tree needing to be cut out of the road, and the whole country, for dozens and scores of miles in advance, being com-

pletely unmasked and open to the sight from any eminence. Often there spreads out before us hundreds of square miles of a river valley, the little fringes of trees along the streams not obscuring but revealing the structure of the country, by indicating its water courses so that, without setting foot in it, we can sit on a mountain and trace out every meandering, not only of its principal river, but of every little brook and creek that glides out from the shadows of the mountains to join it, and see clearly every undulation of surface, every rise of bluff and slope of bench land, and understand all essential features of its topography better than we could those of an eastern valley of equal extent, on which the labor of half a dozen generations has not yet subdued its forests enough to reveal its face to us so clearly as unassisted nature does in the western highland region.

We shall have much to say and see of cañons on our journey to and through the park. Cañon is a Spanish word meaning the gorge or ravine which a stream has cut through a range of hills or mountains. They exist in all mountainous and hilly regions, and many are found in the eastern half of our country though none which approach in grandeur or extent the more remarkable ones in the Rocky and Sierra Nevada Mountains. This State is, I suppose, too level for the formation of any cañons, but on most of the lines of railroad leading east to the seaboard are to be seen cañons, some of much interest geologically and scenically. The more northerly lines, the Great Western, the Canada Southern, and the Lake Shore & Michigan Southern in connection with the Erie or the New York Central will take us across or alongside of the cañon of the Niagara below the falls. Farther east, the Northern Central or the Erie will take us to Watkin's Glen, or the Delaware & Hudson Canal Co.'s lines to Au Sable chasm; on the Pennsylvania railroad, Jack's Narrows and Lewiston Narrows; on the Baltimore & Ohio, that famous gap where the Shenandoah breaks through the Blue Ridge to join the Potomac, of which Jefferson said, "It was worth a journey across the Atlantic to see it;" on the Delaware, Lackawanna & Western railroad, the Delaware Water Gap, where the Delaware breaks through the Blue Ridge, and on the Lehigh Valley railroad, the wild cañon through which the Lehigh river foams for many miles above the picturesquely situated town of Mauch Chunk, and the Lehigh Gap through which the same stream breaks out of the mountains some miles below Mauch Chunk, are some of the more noted cañon scenes to the eastward of us. Regarding the eastern as well as the western railroads, however, we should remember that much of the finest scenery is only to be seen by stopping over, here and there, and going a little away from the line of the road. Those of you who cannot go far from home will find, only about thirty miles from Cleveland, O., on the Cuyahoga river, one of the most picturesque and romantic of all the small cañons I have ever seen east of the Rocky Mountains. The Cleveland, Mt. Vernon & Columbus railroad runs along the whole length of it on the south bank, but your views from the cars will be so unsatisfying that you will wish to stop over at the pretty little village of Cuyahoga Falls, and wander through the gorge.

I regret that I can present to you views of only a few of these eastern cañons, but I have found it difficult to obtain good views of many of them which would illustrate the points which I wish to present to you. As we go to the park we shall be surprised to see how gentle are the slopes across many of the low passes of the main range of the Rocky Mountains, so that in many places the continental divide, which, but a few years ago was thought to offer an insuperable barrier to a railroad, offers far less engineering difficulties to be

surmounted than the various ranges of the Alleghany Mountains. Some of the outlying ranges of the Rocky Mountains present more difficulties, but at several points the *main range* can be crossed with scarcely any more expense than would be required to build the same number of miles in the rolling prairie regions of Iowa or Nebraska, and with vastly less expense than the Alleghany mountains require at the famous Horse Shoe curve on the Pennsylvania railroad. On all the thousands of miles of railroad built and projected in the Rocky Mountain region no tunnel is required one-half as long as the Hoosac Tunnel, which pierces a range of mountains in western Massachusetts whose summits are not as high above the sea level as the lowest valleys of most of the Rocky Mountain region.

Views Presented Illustrating the Lecture.

Supposing the audience about to start for the park the lights were turned down, and on a twenty-foot screen there were shown by the calcium light stereopticon upwards of 50 dissolving views, all photographs from nature and many of them elegantly colored. A map of the western half of the United States emphasized, for a Michigan audience, the size of our country, when the speaker declared that not only Michigan and Indiana, but even Minnesota, Iowa, Missouri, Arkansas, and Louisiana are really *Eastern* States, and that the real *Middle* States are Kansas and Nebraska. Beautifully colored moonlight and sunset and sunrise views of the Hoosac Tunnel and the range through which it is cut, and a view of the famous Horse Shoe curve on the Pennsylvania railroad, served to fix the attention on the lesser difficulties of crossing the main range of the Rockies through several of its low passes, owing to the gentler slopes, while admirably clear views along the Pennsylvania railroad of Jack's Narrows, Allegrippus, Hieroglyphic Rocks, and Pulpit Rock on the Juniata river, and on the Lehigh Valley railroad of Mauch Chunk and the Lehigh Gap in the distance, showed some of the eastern cañons, and the beautiful forest scenery of the Alleghany Mountains, whose dense growth of deciduous trees gives so much greater variety and beauty of wooded landscapes than the coniferous forests of the Rocky Mountains. Maps of the park showed the routes into and through it, and the location of its chief objects of interest. Then followed views of Sentinel Rock with its close resemblance to the face of the Sphinx; The Tower; The Lone Maiden, a curiously eroded rock whose remarkable resemblance to a fashionably dressed woman with a wealth of hair flowing loosely down the back naturally suggests its name, and might easily have given the hint for the origin of the "tie-back" style of dress; two cascades and five cataracts; two general views in the geyser basin; nine views of seven of the great geyser craters; a daylight and a moonlight view of the eruption of Old Faithful geyser, spouting its column, 7 feet by 2 feet from 125 to 175 feet high for from 4 to 6 minutes every sixty-five minutes; a moonlight view of the eruption of the Giant geyser, which at very irregular periods spouts a column 5 feet in diameter, to heights ranging from 150 to 250 feet, while an immense pillar of steam towers above the water, sometimes a clearly defined column from 1,200 to 1,500 feet high; an elegantly colored sunrise scene on Yellowstone lake; moonlight views of the Giant's Gateway in the cañon of Gardiner's river, and of the west shore of Gallatin lake; a view of a crater of the mud volcanoes on the west bank of the Yellowstone river; a hunting scene on Alum creek; four views of specimens: 1st. Of curiously ornamented siliceous pebbles (such as abound

about the geyser craters). 2d. Of silicified wood. 3d. Of petrified grasshoppers. 4th. Of amethysts broken out of the silicified trunk of a tree; two views of the grand cañon of the Yellowstone; nine views of the mammoth hot springs with their wonderful terraces and ridges; three views of the ornamental hot springs of the geyser basin and three views of the empty crater of the Periodical Hot Lake, with its strangely beautiful interior ornamentation of limestone deposited in singularly accurate imitations of ferns and acanthus leaves, concluding with the crater of an extinct geyser, 45 feet high and 22 in diameter at the base, called, from its shape, the Cap of Liberty, and very appropriately surmounted by the stars and stripes. Each view was briefly described and its more important features pointed out, while incidents of personal experience, humorous and otherwise of the lecturer, who, with his family, made two journeys through the park in 1873 and 1875, added something of human interest to the strange beauty and wild grandeur of our far Western Wonderland.

PRESIDENT'S ADDRESS.

THE ASSOCIATION AND THE EDUCATIONAL INTERESTS OF THE STATE.

BY C. B. THOMAS.

Michigan, as a State, is forty-three years old. She was born into the federal union in 1837, when the country was prostrated with financial fever. But the child of this distempered travail bears no birthmark. In any aspect there is none more fair in all the sisterhood of states. At that time she had a total population of about 100,000, and a school population of about 15,000. In her forty-third year she has a total population of 1,600,000 and a school population of half a million. Of these 500,000 children, 350,000 are in the public schools, marching toward manhood and womanhood under the lead of 13,000 teachers.

Above these rise eight denominational colleges with 76 instructors and nearly 2,000 students, while over and above all falls the beneficent shadow of our great University, with its faculty of 70 instructors and its grand army of over 1,500 students.

Here, then, is the panorama of our Michigan system. At one extreme a lone school-house by the roadside, at the other the University, while all the space between is thickly set with the graded schools.

This association represents all the educational forces of the State. It is debtor to the University, the colleges, the Normal School, the graded schools and the districts of remote hamlets. The association welcomes all; it would aid all. What, then, are the relations of the association to the educational interests of the State? The question is not new. It is often asked in the confidential intercourse of teachers. I have never heard a definite answer.

Some months since a circular letter was sent to prominent officers of associations in other states. This letter asked seven questions:

1. What is the average attendance of teachers upon the meetings of your association?
2. What is the character of its exercises?
3. What are its special aims?
4. Does it attempt to urge or shape legislation?
5. In what direction does it do its best work?
6. What are its short-comings, in what does it fail?
7. What suggestions can you give for its higher usefulness?

Replies were received from ten states, most of them prepared with fullness and candor. These replies came from Iowa, Illinois, Wisconsin, and Ohio, our neighbors, and from Vermont, Connecticut, New York, New Jersey, Rhode Island and Maryland. Let me try to give you the average tone of these letters:

1. The average attendance of teachers is about 200. Maryland, Wisconsin and Vermont fall below this; Connecticut, New York, Ohio and Rhode Island rise above the average.

2. There is little variety in the proceedings. The reading of formal papers, and their more or less formal discussion, is universal. Illinois tried meeting in sections, but lost by subdivision of force, numbers and enthusiasm. Rhode Island is, however, now trying the experiment, and is, so far, successful.

3. As a rule, associations seem not to have been successful in attempting, directly, to shape legislation. Two States, Vermont and New York, are proud of their work in this direction. One confesses to most humiliating affronts. Another says: "The association can point to no ear-marks of its own on the statute book, but has prevented some bad legislation;" leaving us to infer that it has kept out of the statute book the marks of ears longer than its own.

4. On the subject of special aims the replies were full and exceedingly suggestive. Illinois and Maryland say frankly "we have none." Iowa says, "to quicken enthusiasm;" Wisconsin, "to impart experience of the veteran to the new recruit, to seek for better methods, and to have a good time;" Vermont, "to consider practical questions and to promote good fellowship;" New York, "to equalize educational ideas and to establish an *esprit de corps;*" Ohio, "to encourage a high standard of attainment, and to incite and maintain a high professional spirit."

5. Naturally the best work of the associations has been in the line of their "special aims," and the answers under this head are so similar to the last as to make a summary unnecessary. One State, Rhode Island, says its best work consists in getting out two-thirds of the teachers of the State, uniting and solidifying their educational forces and making them a power in the State. But Rhode Island can find its full pattern 43 times in Michigan, with some odd square miles remaining. It would not be difficult to gather two-thirds of the teachers of one of our counties into an association and make its educational forces solid. Another State sadly admits that its best work is to hold on to life with the lean hope that some day there will be a work for it to do.

6. As to shortcomings my correspondents were voluble. One says: "We fail to interest the people. We fail to interest the teachers as a body. How much shorter could we come?" The Empire State fails oftenest "from inefficiency in its officers, and too often from wordy but aimless discussions." There are in that State some association-killers. Several writers complain of a want of definiteness, a lack of unity and distinct purpose. One, with genuine pathos, exclaims, "Oh for a Joshua to lead us into the promised land! for *one;* we have too many!" And still another complains, "we have too many formal papers; too little discussion and interchange of views and ideas."

Doubtless most of us have been comforted by the tone of these replies. "Misery loves company." Now, in the light of these statements, where do we stand? Our attendance is about the average. We cannot boast; a blush would be more becoming. Our programmes do not greatly excel in originality. We have had special aims, but we have only coquetted with them. We have not taken them "for better, for worse, to have and to hold, to love and to cherish," till they blossom in progress, ripen into law and bring forth fruit in thorough reform. Even through the short twenty-nine years of our existence we can with difficulty trace "where one increasing purpose runs," and thus prove that our plans have "widened with the process of the suns."

I would not disparage what we have accomplished. The association was never mute when great questions were ripe for discussion. Its earlier sessions called loudly for a Normal School, and the history of the institution at Ypsilanti has vindicated the wisdom of that appeal. And our hearts are filled with high hopes for its larger usefulness under its new principal. The association

was first to demand the county superintendency, and perhaps succeeded too early. In a country like ours laws are maintained in force by popular approval. Let us as teachers build and shape the educational ideas of the people, and they will elect our legislatures and put our laws upon the statute book.

From all the foregoing it is not difficult to frame an answer to our inquiry as to the relation of the association to our educational interests. It is the grand "board of equalization," which should examine into and decide upon all questions of value and of practical utility. It is, or should be, the heart, whose every throb quickens the educational pulse in the remotest district. It is the ear, which should gather notes of progress from every point of the compass. It is, or should be, the voice, crying, that the paths of educational progress may be made straight. It is, or should be, the center of light and heat, toward which all should gravitate; from which should radiate influences potent with vital energy.

If this is the position we should hold among the educational forces of the State, what shall I say as to our shortcomings? I said we should, perhaps, blush for our attendance; but this sign of shame should be put on not for the quality but for the quantity of our gatherings. This association has an "old guard" that was never found wanting. Year after year these veterans come up here hopeful, confident, competent; and I venture to repeat a remark made to me at a recent meeting by one familiar with similar gatherings in other States, that nowhere else did he find so large a proportion of men and women fit to be leaders in educational progress.

And here let me note our saddest failure. Instead of gathering 200, sometimes 300 teachers, we should come up here at least a thousand strong! I hear teachers complaining sometimes that they can "take nothing from the meetings of the association for use in the school-room." There is no chalk-dust in the air, and their tests of utility are at fault. These teachers need to know that for the growth of mind there is better nourishment than the multiplication table. Highest qualifications come from collision with other minds, from self-measurement with foreign standards.

Every teacher in the State is in some measure responsible for the solidity, the concentration and the direction of the educational forces of Michigan. That measure of responsibility commands actual presence here. Sickness is a valid excuse for absence. There are teachers—I know some—whose pitiful salaries are the lean support of widowed mothers. I hardly know whether, like their elder sister in self-sacrifice, they should cast into our treasury the widow's mite. Poverty is, perhaps, a valid excuse. But I hold that indifference in a teacher is the unpardonable sin which should have forgiveness neither in this gathering nor in the educational circle at home.

Let me suggest, in addition, some things which seem to me objects worthy the efforts of this body. I believe one of the duties of the association is to encourage, and, within certain limits, to direct, a broader and higher culture among teachers. There are many among Michigan teachers with scholarly tastes. They read, are thoughtful, perhaps philosophical. But subtract these from our 13,000 teachers and the great remainder of uncultured will still be an appalling total. A small army of nominal teachers enter upon and remain in the work for years, with almost no knowledge of the science and art of teaching, and also without that general information which sometimes almost atones for lack of special training. Many do not read because they do not know what to read. Educational periodicals and books are unknown to them. They teach as they were taught; and this in-and-in process of training goes on

indefinitely. Well, streams rise not above their springs, and here the springs were on the very edge of an oozy marsh.

Last year a committee of this association reported a list of 100 books best suited for a district school library. These 100 volumes were selected with great care and delicate discrimination from the broad field of literature. Teaching may not be a profession. The mastery of a peculiar and distinctive body of learning is not yet necessary for admission to its practice. But there is a literature of teaching. There are facts and elementary principles that constitute its science; there are methods of application and practice that comprise its arts, and these, mingled with some rubbish, can be found in books. Cannot this association do a good work for our teachers by assorting and classifying this literature? Which are the best five books in it for a teacher to own and read? For those of larger means increase the list to ten, to twenty. Add them to the library list of last year. A thousand teachers in Michigan will thank you for an answer to the question. There are men among us competent to furnish the answer. Shall we call upon them for it?

There should be, I am persuaded, a thorough reform in the examination of teachers. We believe that a teacher in the common schools of to-day should have a training, a range of information; in one word, a culture that was not demanded, seldom needed, forty years ago. Examinations have not kept pace with the advance of requirements. Examinations have marked time while public expectancy of the schools has marched. The better class of country teachers under our present system have little respect for the examinations, often less for their examiners. They feel, when the examinations are over, when the best has been done, that the growing teacher who rises above the text-book, who sees over the wall into the thoughtful world, who can carry into the school an atmosphere that has in it the spirit of a new birth, the very breath of intellectual life for pupils, they feel that he or she has not been discovered. The touch of the examiner is not sensitive enough; his tests fail to reveal what is of highest value. These examiners are too often blundering prospectors who pick a nugget now and then in the dry beds of old streams, but miss the richer deposits in the auriferous rocks that rise all around them. Whatever system of superintendency at last obtains, it must, as a condition of life, give us reform, both in the matter and manner of examinations.

The State Board of Education has made an excellent beginning in its Lansing examinations. But its sessions, like those of the Supreme Court in civil administration, are too remote and too expensive to meet the wants of all. Could the State be districted, and the individual members of the board, with local assistants, hold examinations in the several districts? These examinations should cover not only the matter of the text books, but for teachers of highest grade should test the reading, the literary taste and ability, the intellectual bias and the moral sympathies. Set up this standard. The holders of certificates will soon take higher rank and receive better compensation. The best teachers will rise to it eagerly; the poor will sink out of sight. The ranks may be thinned, but the army, reduced to fighting weight, will be vastly more effective. Is it not the duty of this association to call for this advance?

I said in the outset that our Michigan system of education embraced the log school-house and the University. The line was made complete a few years since when the University reached down and clasped hands with the high schools. But we of the high schools are sometimes troubled to hold on. There is danger that we may be lifted from our footing and left dangling in air. There is, I am persuaded, need of a more careful adjustment. We of the high schools

stand on the good will, the proud consent of the people, and we must not, we need not, be drawn out of relation with them. I believe this association, composed largely of both University and high school men, should have a voice in this adjustment. I believe the University will welcome a council on this subject of common interest. Shall we not ask it?

Never in the history of this country were greater burdens laid upon its educational forces than they bear to-day. From Europe flows a rapidly increasing tide of population, for our use wholly uneducated. On the census charts the southern half of the republic is black with illiteracy. The ignorance we welcome from abroad must be trained to good citizenship, and there can be no safety for our institutions till every township and parish of the south shall become the site of flourishing schools. Low lands are made fertile by alluvium from adjacent high lands. Streams of culture flowing from the educated States of the north, among which Michigan ranks high, must be relied upon to redeem the south. Only by education and consequent elevation can the south be brought into real union with the north and the two sections become one country.

These are not idle words, the vagary of a school-master's fancy. Within a few years our most illustrious citizen, General Grant, has urged this idea before the people, and presidents have suggested an educational policy to Congress. The Senate has just passed a bill appropriating certain funds for public education, and the president who will take his seat in March next is a teacher. The day begins to dawn. The time is not distant when the government will take certain features of our educational system under national control. The government, as a measure of self-defense, will destroy illiteracy, destroy it by lifting it up into the light of knowledge. The time is coming when no section will be permitted to blacken the chart of our country, when no state or city will dare to jeopard peace and good government by flinging into the political scales a mass of ignorant citizenship. It is our duty to make Michigan effective in hastening this "golden year."

May I recapitulate?

1. I would urge the association to plead with superintendents and teachers for a heartier interest in the work of the association itself.

2. Let us seek, by all proper means, for a better system of superintendency for our common schools.

3. Let us strive to secure for teachers (1) a better professional training, (2) a more careful and discriminating examination, (3) a higher grade of certificate, and (4) a longer immunity from re-examination.

4. Let us seek a better adjustment of the high school and the University.

5. We must rise to a higher appreciation of the mission of the association, to a broader purpose to make its influence felt in the educational progress of the time.

I have sketched a line of action that calls for work; but it is work that needs to be done. The "golden year" never comes to those who simply stand and wait.

> "Old writers pushed the happy season back—
> The more fools they,—we forward: dreamers both:
> You most, that in an age when every hour
> Must sweat its sixty minutes to the death,
> Live on, God love us, as if the seedsman, rapt
> Upon the teeming harvest, should not dip
> His hand into the bag; but well I know
> That unto him who works, and feels he works,
> This same grand year is ever at the doors."

PAPERS AND DISCUSSIONS.

SPHERE OF THE VILLAGE HIGH SCHOOL.

BY C. A. COOK.

Our subject takes for granted the existence of the village high school. Perhaps the term is a misnomer; doubtless it is in many cases; yet, in many other, and I think in the majority of instances, it is doing a work that is peculiarly its own; and is, or may be, as efficient in its own sphere as are the higher institutions of learning in their work. There is an idea prevalent that a village high school can be no better than a good grammar school in a city; or, to express the same thought in words of another, "A good grammar school is better than a poor high school." This is a truism that goes without saying; yet, to deal still farther in axioms, a good high school and a good grammar school are better than either alone.

In this paper I shall proceed upon the supposition that a high school cannot exist in a village where only four teachers are employed, and ought not to exist in a school of less than six teachers; because grading above the grammar department is impossible with but four teachers, and is very imperfectly done with five. These remarks, then, will apply to schools of from six to ten teachers, as, if that number be exceeded, we shall trench upon city ground. Indeed I believe there is one city in this county (Ingham) which has but eight teachers; yet, for the sake of consistency, such premature cities will be claimed as villages; otherwise, there are places with more than ten teachers that are not technically cities, notably that very mature village, Kalamazoo.

On account of this grammar school idea, a few words will be said in defense of the village high school. Perhaps a correct definition of the term high school, sufficiently exact at least for Michigan, is the following: a preparatory school to some one or more courses of study pursued in the State University. A grammar school is preparatory to the high school, and includes the 5th, 6th, 7th and 8th years of the graded course of study adopted by the Michigan association of city superintendents of schools in May, 1875. The high school, as above defined, would continue the course with the 9th, 10th, 11th and 12th years.

Can a village have such a high school? It is fairly presumable that a majority of the principals and superintendents of schools, members of this association, have either been taught in such schools or have conducted them. The history of our State school system for the period before the war shows that the larger number of students prepared for the University were from village schools. Since that time, and more particularly for the last ten years, the cities have taken the lead. Within the past few years the high school in Ann

Arbor has taken a position as a preparatory school for University work which no other school in the State can hope to reach—a fact due to its location. A writer in the National Journal of Education says of this school: "It has annually graduated from fifty to seventy pupils, three-fourths of whom have been prepared for college, and from thirty to forty of whom have annually entered the University of Michigan. The larger portion of these graduates are non-resident, who have gone there for the advantages of the school." This quotation is substantially truthful.

I learn from the records in the State University that out of one hundred and nineteen Michigan pupils who were examined by the University authorities in 1879, forty-four were credited to the Ann Arbor high school, leaving but seventy-five for all the rest of the schools of the State. Of these seventy-five, twenty-one were from village schools, or about twenty-eight per cent of all the pupils from the high schools, rejecting Ann Arbor, were from villages of from six to ten teachers. Counting Ann Arbor the percentage would be about eighteen. The University examinations for the present year give a still better showing for the villages, they being represented by thirty-six per cent of all examined, not counting Ann Arbor, or by twenty-five per cent when Ann Arbor is reckoned.

Before the year 1879 there are no means of knowing accurately this percentage, for not until then were the pupils credited to their several preparatory schools upon the University register. The question, can villages have high schools? is answered by the fact that they *do* have them, and their past history shows them to have been successful.

Another question naturally suggests itself,—ought a village to have a high school? The people of villages demand the high school; they have abundantly proven themselves willing to pay for it, and every successive annual meeting of the district has resulted in a continued and hearty support of the system. Undoubtedly in some instances they have not obtained the worth of their money, but this is an evil common to all public affairs. There is not a branch of our general government, civil or military, or of our State, county and township administrations of which the same cannot be said. Municipal corporations find the same difficulty in carrying out measures of public improvement, from laying a pavement to building a court-house. All this argues that there is need in some places, perhaps in all, of reform, and not a need of doing away entirely with our officials or their grade of work. It is a part of the sphere of the village high school to answer this demand of the people by giving them the privilege of an education, by giving to a certain percentage of its school population at least a dim idea of what an advanced education may be. This percentage is, by the way, greater in the village than in the city; that is, a greater number in proportion to the population avail themselves of high school privileges in the former, though the percentage is by no means what it ought to be. The status of the village high school now depends almost entirely upon the individuality of the principal. While the element of personality cannot and ought not to be completely eradicated, yet the efficiency of the school must not depend upon any one man so entirely as now, or all permanency is destroyed.

The primary difficulty is a lack of unity in our school system. Toward harmonious action the University has taken the first step by making a living connection between itself and the high school. It is now the duty of the high school and of our legislators to make a similar connection between the high school and the country district.

A teacher ought to lift his pupils to a higher plane, to a position nearer himself. The University has been a true teacher in our State school system, but the high school has failed in its duty and reform is necessary.

Pupils have been admitted to both city and village high schools from the country to what are termed ungraded classes. I conceive this practice to be the bane of our village schools. It is based upon the theory that the pupil of fourteen years is competent to be his own judge as to what he ought to study. The ungraded pupils of all schools with which I have been acquainted take virtually optional work. The results are bad. The theory is wrong. The ungraded pupil almost invariably leaves the high school with no better education than he could have obtained in a well regulated grammar department, or, in other words, a properly conducted country school.

The country schools of to-day are not equal to the country schools of twenty-five years ago. The city and village schools of the present are far in advance of those of the past, and are constantly progressing. In my own county (Washtenaw) there are country district schools where grammar and history are not taught at all, where geography is almost unknown, where there is but sufficient blackboard to show that this is a school room. Now, be it remembered that this is the county in which one of the best preparatory schools in the United States, that of Ann Arbor, is situated; and in addition the city high school of Ypsilanti and the village high schools of Saline, Manchester, Chelsea and Dexter, all of which have done and are prepared to do high school work.

The country schools as a rule teach but very little as it ought to be taught, not even the practical arithmetic, which the pupils find later in life not to be so practical after all. This condition of affairs is mainly caused by the fact that a big boy or girl from the country can at any time enter the ungraded class of the neighboring high school. The best element of the country school is thus taken away from it, leaving scarcely more than the A B C pupils, and consequently no incentive to those remaining to do better work than is found in our village primaries.

Observe in this connection that I place the burden of the fault upon the high school and not upon the country school teacher. The large majority of them would gladly do better work if they were given the opportunity. As it is there is no incentive for the teacher to exert himself. The greater part of the teachers of winter schools are young men naturally capable, willing to do the drudgery of the district school if they can but see results in the shape of a little work well done in all their classes, and especially in the higher class of studies that naturally belong to the country school. At the outset, however, they are met by the chilling fact that just as soon as a pupil can "figger through practical" he is going to be received as an ungraded pupil in some city or village high school. "God save the mark."

The greatest defect in our high school work is the ungraded pupilage; otherwise our high schools are better than formerly as stated above. Who wants to go back to the academy system? And such a system would be the result if the high schools were taken from our villages; or else both village and country would necessarily send their high school students to a few central schools. Practically these central schools, so far as the State at large is concerned, would reduce to but two, the Ann Arbor high school for those desiring preparatory work, the State Normal School for those desiring to teach, and the Agricultural College. The aggregate scholarship of the State would be decreased by such an arrangement. The boy who can now walk into the village a distance

of two to four miles for the purpose of obtaining an education would then be entirely ruled out, as also his village comrades, for where, in the majority of cases, are the funds to come from to support them if they cannot board at home and go to school? When a little older the boy of talent and energy can "hoe his own row," and has done it to such an extent that President Angell could say that "Of the 5,700 graduates of the University the larger number were of humble means." What a story of self-denial and hard work is contained in those few words.

I am not one of those who would make our educational system, as has been said, "a parade and band-wagon performance for the sake of rich men's darlings." Degrading any part of our present school system would have a tendency toward favoring the rich at the expense of the poor. No, do not drive the high school from the village, from the reach of the small farmer, the mechanic and the laborer, but reform it. Reform it by demanding better work of the country school. Require of the country school exactly what we would require of our own grammar department, viz.: a fair knowledge of reading and spelling, good practical penmanship, arithmetic through percentage, modern geography, United States history, and a fair start in English grammar and composition. Make this demand and adhere to it so rigidly that entrance to a high school must be to its course of study. Let the name "ungraded pupil" drop from our vocabulary.

The benefit of such a requirement would extend not only to the applicant for admission to the high school, but also to that much larger number of country pupils who never see the inside of a high school room. In some such manner alone can we raise the country school to a position where it can compare with the primary schools of some of our neighboring States. The rotten mudsill of our educational system must be crystallized into rock. It will be a slow process. It is a part of the sphere of the village high school to help in this work by furnishing the "sand."

Let the village high school teacher labor to this end by working personally among the teachers and officers of country districts, bringing about a uniformity of methods of instruction and uniformity of grading. Then, fellow-teachers of the village schools, let us take a new tack, and if some of our brethren in the cities choose to follow in our wake we will not churlishly leave them in the lurch, but gladly take them in tow.

How long and what shall be the course of study in a village high school? I would say a four years' course which would theoretically graduate the pupil at the age of seventeen, none too old surely; but practically the majority of pupils would graduate at an age somewhat greater, and probably somewhat older than in the city. Even if the average age of graduation were nineteen I would advocate four years' work in the course. These four years include the best time for study in the average pupil's life. Let him who does not intend to go to college have the full benefit of them. For the student who does intend to pursue a collegiate course four years are absolutely necessary for preparation.

Schools of four or five teachers could to advantage have a course of two years above the grammar department, or of ten years in all. Such a course might be made preparatory to the State Normal School. In the report of the Superintendent of Public Instruction for 1878 may be found the opinions on this subject of fourteen village high school teachers. All of them are in favor of a ten years' course. Eleven of them represent schools of four teachers or less. I would class all schools with one, two, or three teachers as grammar schools.

We now come to the question, what shall the course of study be? It is impossible for a village school having necessarily but two teachers in its high school department to do the work of a city school having from three to ten or more teachers in the same department.

Herein consists the difference between the city and village high schools. Too many village schools in our State are attempting to do the work of a school more fully equipped in teachers and apparatus than can be supported in a village. Nor is this so much the fault of the individual teacher as of the system. If my neighboring rival teacher carries one pupil through Sanscrit, surely I shall offset his work by starting a class in Hebrew, which is especially my *forte*. Time is lost upon one or two which should be given to the majority. I do not believe that it is the province of the village school to provide special courses for only about two or three per cent of the enrollment of the high school department. I do believe, however, that every high school teacher should stand ready to help every student desiring it to classical preparatory work; but I shall return to this subject further on.

Every village high school should have a course of study that will prepare a student for the University, and but one such course. Two teachers can successfully do the required work. Every additional course of study needs at least one extra teacher; therefore the city alone can offer to the student a choice of lines of work. In this respect the city has vastly the advantage of the village.

As to which of the several courses of study now offered by the University is best for the village, my own choice would be the Latin scientific, containing the Latin and either the French or German. I would recommend this course rather than the classical, because a large majority of our people have a seemingly unconquerable aversion to the study of Greek. I would recommend it in preference to a purely English course, because I believe the study of language to be the best general preparation to the higher education, as well as the best mental discipline obtainable in common school life. Our village schools should work for the same general results as other schools; that line of study which will best prepare the average pupil to live life not only as it is, but also as it ought to be, is the course of study to adopt.

Perhaps different localities require different work; but in the absence of a criterion to guide us, will it not be best to adhere to a position that we know is tenable in both theory and practice, viz.: the village high school shall be confined to one course of study, and that preparatory to the University? In a single course of study it can be and has been thoroughly successful, and can therefore compete in its own work with the city high school.

The sphere of the village teacher I conceive to be something outside of and beyond that of his school. His work should be one of personal interest in his pupils. If he see a student whom he thinks would be exceptionally benefited by a classical course of study, or by work beyond the school curriculum, let him encourage that student, even to the extent of hearing him recite outside of school hours. By so doing he in no way interferes with the regular work of the school; but he does create and sustain an interest in a better class of work than the school can regularly afford.

In speaking of a course of study, understand that I do not claim that the Latin scientific course is the only one. I do think it best adapted to the average village high school of our State. Perhaps the English course would be better in some places, but in any case I would require preparatory work to the University. I understand perfectly well that a large majority of the pupils

of such a high school will never complete the course; but this is true of all high schools in Michigan, and will always, probably, be true of the upper grades in a public school system. If, then, on this account preparation to the University be discarded there would be no preparatory work done. The pupil who comes into the high school for a few terms, or a single term only, can derive as much benefit from the above described course of study as he could from an ungraded course, or from a course that is not preparatory to the University. He would get the common English branches, and perhaps a little additional work that would do him no hurt whatever, but on the contrary positive good.

I am aware that the principal object of the village high school is not to prepare students for the University. Yet I believe such preparatory course best adapted to the bread and butter part of life.

The village high school must furnish teachers to the country school in its immediate vicinity. Such work it has done in the past and will have to do hereafter. Incompetent teachers, the result of a still more incompetent system, must be replaced by those who are able and willing to do better work. The material for good teachers can be found in every village school, and if instruction in the country school has been bad, it is, partially at least, the fault of the system just above it. It is our part to see that incompetency is crowded out by more thorough grading and consequent better work.

In the foregoing I have described as best I might the sphere of the village high school as it is and as it ought to be. Now, what action should be taken to bring about unity in our system? I shall trespass upon the ground of another in giving here my ideas of what legislation should be adopted to bring the village high school into sympathy and harmony with the State system, and yet the subject seems to be appropriate to my paper and therefore I hope I may be borne with if I briefly state my views.

Let the State board of education have power to prescribe to country and village schools a course of study that shall be identical through the first eight grades. Let them have power also to prescribe to villages a high school course of study that shall be best adapted in their judgment to the several localities.

For purposes of supervision let each village or smaller city high school, together with the surrounding country schools, be under one superintendent elected by a board consisting of as many representatives of the people from each school district as there are school rooms in such district presided over by a teacher during at least six months of the year. The most of the country schools would thus be brought under the immediate influence of some central high school. Such a plan would necessitate free tuition in the high school to all the districts under the same management. It would also necessitate a proportionate payment by each district to a common fund for the support of the high school and superintendent. In the newer counties there are wide areas in which no high school nucleus exists. In such case let a superintendent be elected in the same manner but for a wider extent of country. Let it be understood, however, that no person could legally qualify for the office of superintendent until he had passed an examination before the State board of education. Let each superintendent examine the teachers of his own jurisdiction. Perhaps such a system has fatal defects, but the matter of cost is not one of them. In the older counties each superintendent would have about three or four townships to oversee. He could at the same time in a village school do the most of the work of a principal. One day in the week for super-

vision of country schools would be a vast improvement over present methods. In a system of which a small city is the center, it would give to the superintendent no more work, on the average, than the superintendents of our largest city schools are now doing.

Finally, to summarize: 1, a village can have a good high school; 2, it ought to have a good high school; 3, its course of study should extend through four years; 4, there should be but one such course; 5, that course should be preparatory to the University; 6, the village high school should furnish teachers to the country; 7, there should be a closer connection between village and country schools; 8, legislation should bring about this connection.

DISCUSSION OF THE PRECEDING PAPER.

Z. C. SPENCER said:

The definition of a high school as given in the paper will scarcely meet with general assent. Only those schools whose work is the sum of the requirements for admission to the different departments of the University can properly be styled high schools. To do this work efficiently there must be a full corps of teachers, each of whom should be a specialist—not less than five or six—together with all necessary appliances and apparatus. Those in charge of our village high schools labor with great odds against them when they attempt to prepare students for the University as their chief aim and at the same time attempt to do justice to the large majority of pupils who will never attend any other school. The task is impossible, and poor work must ensue either in one direction or in the other.

A course of study for the class of schools under discussion should be framed with special reference to the wants of those who are to be their pupils. A course of "study preparatory to the University, and only one," would do manifest injustice to the large majority of pupils, who require as thorough an English education as it is possible for the high school to give. A course of study that will contribute most abundantly to this end is the one demanded.

There can be no question that a more intimate relationship between high schools and district schools, and a nicer adjustment between their courses of study would be attended with very satisfactory results. Teachers in the rural districts should adopt a system of grading akin to that in operation in the fully graded school, and should aim to send up pupils who shall be well prepared for entrance into the village and city high schools. It is entirely within the province of the latter to aid in this work, and by suggestions and a wise distribution of information to bring about the above mentioned relationship.

J. M. B. SILL said:

I wish to protest against the doctrine that the sole or even the chief end of the high schools is to prepare pupils for entrance to the University.

TEXT BOOKS *vs.* BETTER MEANS IN THE SCHOOL ROOM.*

C. F. R. BELLOWS said:

The statement of the topic for the present discussion distinguishes two classes of means employed in school-room work. The first is quite clearly specified, but the second is indicated somewhat ambiguously. Considering, however, the certificate of good character which it bears I am inclined on general principles to a favorable opinion of it, whatever may prove to be its name; and though I may regard text-books as being good means in the school-room, still if there are means entitled to be called better ones, then I unhesitatingly announce myself on their side.

But putting this and that together, I am led to guess that the distinction embodied in the statement of the topic before us is that between the use of text-books or the written method of teaching and the employment of what is called the oral or objective method. I shall therefore offer what I may say upon the subject from that point of view.

Now, as must at once appear evident, it is impossible to compare any two classes of educational means except so far as they are applicable to ends which are in some sense identical; the two must have some common unit. Thus, to illustrate, suppose the topic was Hammers *vs.* Hand-axes as means in carpentry. It would be manifestly nonsense to ask which is the better of the two means in the attainment of ends which have nothing in common, for example, the driving of nails and the sharpening of stakes. Everybody knows that there can be no comparison between them in these respects.

Again, as setting forth the subject before us, our illustration may do us further service in calling attention to the fact that we might decide in favor of the hammer or of the hand-ax even as employed for the same purpose of driving nails accordingly as the nail was a small one to be driven in making, for example, a piece of furniture, or a large one in laying a sidewalk.

And so, in determining the question between the text-book and the oral method as means in the school-room, it will be necessary to single out some particular end of school-room work, if there be one, to which the two instrumentalities are both suited; and, moreover, to eliminate any circumstances that may favor the use of the one or of the other in particular cases. Now, whether these conditions upon which our question must rest can be fulfilled or not, it is obvious that a thorough discussion of the subject would necessarily open the whole matter of ends, ways and means of school-room work; and more than that, it would be necessary, as a preliminary step, to prepare a dictionary of educational terms, to discuss and adopt the precise definitions in accordance with which the terms employed should be used. We therefore cannot, in the brief time we have here, enter upon an exhaustive consideration of the subject. We must be content with touching upon it at a few points only and in a rather random and unsystematic way.

Comparing the methods of oral and of text-book instruction, one of the most apparent distinctions between them is that of time and place, or the period in the pupil's course at which each is chiefly used.

The very first years of the child's life are occupied with those mental experiences which are incident to the meeting of the spontaneous activities of the opening mind with the objects and events by which infancy is surrounded. A

*The discussion of this subject was opened by I. M. WELLINGTON, but his remarks have not been furnished for publication.

little further on we attempt to facilitate those experiences by manipulating in some way their natural occasions. We endeavor to promote them, to give them a certain form and direction by artificial procedures. Viewing the child's mind at first somewhat as we do a field in the state of nature, we seek, in place of a superficial soil supporting a wild growth of ideas of all sorts, to obtain a deeper one, richer and productive of a cultivable crop. The means of teaching employed at this period must necessarily be such as customarily designated the object lesson. The method is termed the oral or objective.

By the oral method is to be understood a way of teaching in which some object matter adapted to occasion a certain mental activity or set of activities is adjusted to the powers of the mind sought thereby to be exercised. The necessary adjustment of the object matter to the mind is accomplished chiefly through the medium of speech, as also are communicated the names or other new terms by use of which the pupil's thoughts upon the object are expressed. In the above work three things are distinguishable: (1), the pupil's mind, or an activity of mental forces; (2), some object matter suited to engage and exercise the mental activities of the pupil; and (3), the teacher mediating the mental forces of the pupil and the object matter upon which those forces are engaged with such an adjusting of the one to the other as to evolve some thought-product of the pupil's mind.

There are accordingly three different forms of referring to or naming the above method of teaching: 1st, considering it on the pupil's side and regarding the fact that only exercise develops the mental powers, it is called the *developing* method; 2d, considering it on the side of some object matter used as the occasion of mental activity, it is called the *objective* method; and 3d, viewed on the teacher's side and in the light of the means of communication employed, it is called the *oral* method. But, as it seems to me, the term oral, as thus used, is both superficial and misleading. Superficial, in that it narrowly marks the means employed merely instead of the more essential thing, that which is sought to be done by use of the means employed. Misleading, in that it conducts toward the mistake that any talking or lecturing form of teaching exhibits the oral method. A similar objection rests against the use of the term objective. It is liable to be understood as referring to the use of material things only as object matter, and as standing for a way of teaching in which telling the child a good deal, about half of which he already knows, and the rest of which he is not prepared to know, is made the main point of the work, a mistake which has rendered the object lesson the bedridden thing it is.

The term developing method seems to me to be better chosen. It points to that which is characteristic of the result achieved by its use as a method of teaching, the development of the mental powers of the pupil and the consequent development of language as a means of embodying the products of mental activity.

Let us consider now, briefly, the nature of the development of the child's mind, commencing with infancy. The infant at first is deaf, dumb and blind. It tastes not, handles not. Soon its mind, pushed out by instinct into the world of things, begins to grope about, stumbling upon some vague thing which for an instant catches and holds the attention. The experience is repeated again, again and again. The shadowy something dissolves into its parts, which are soon reunited in a clear whole of perception. This is nature's work pure and simple. It goes on for weeks and months and even years. The mother, and afterward the teacher, take up the work, combining art with nature in grasping and holding more firmly the attention and thus stimulating and facilitating

the process of perception. Here the development method is at its initial point.

As perceptions of things become somewhat well developed the instinct of language comes into play. Names and terms are reached after as material things were at the beginning. If left to itself the child would invent them as the race did before it. We communicate them to escape a confusion of tongues. In the crucible of the brain object matter is transmuted into words. The word is welded to the object, becomes the form of the mind's possession of the object. Thus language marks the first stage in the evolution of mind following perception. But of course words at first are very empty. The child hears and even uses them while as yet they are scarcely more than sounds to his ear. Life fills them fuller and fuller, and generation after generation swells their content. Words by their mutual attractions assume their places in the system of the sentence, and the proposition appears upon the scene. Pictorial and printed language are immediate outgrowths of spoken; and the child, through a necessity of mind, comes naturally to the effort of learning by means of books. Says Dr. Porter: "It is only by language—the sound to the ear and its symbol for the eye—that the products of our activity can be fixed so as to be the objects of recall and future use. Hence words spring into being as fast as definite conceptions are formed. Hence it is as natural for man to speak as it is to think; and man speaks because he thinks. The name petrifies, preserves and exhibits the flitting concept as in a crystal shrine, both hard and clear. The proposition embodies the judgment for the use of the man who first thinks it and who expresses it to stimulate the thinking of others."

Thus this is my thesis, that from the very dawn of intellectual life are traceable indications pointing unerringly to the coming of some form of written language; that under a normal condition of things it is an unavoidable contingency of thought; that it is more a natural than an artificial product. Born of thought, yet ministering to thought, it conserves the thinking of the ages that are past, and at the same time forms the chief corner-stone of the fabric of thought which the future ages shall rear. So when the child has compassed somewhat fully the idea of the use of words, has a fair knowledge of their simplest and most common meanings, he is prepared to begin to learn through the medium of books. I go further, and say it is important that he now make that beginning. Children take to books as ducks to water. At the proper age it is as natural to them to learn to read as it was to learn to talk or to walk. Moreover, it is perfectly natural to them to acquire information and knowledge in that way. Their ancestors for a score of generations have studied books; and even though it was purely an artificial way of learning at first, which we do not grant, it has become thoroughly natural now.

From this point the development method of teaching occupies relatively a less and less place throughout the pupil's course. It falls out of the teacher's hand and into the pupil's. If the child has been properly trained during the presentative period he has learned to use the method for himself, as it were, as occasion requires.

I consider it as the most clearly defined and practical end of primary teaching to put the child in thorough possession of ability to acquire knowledge by use of the printed page; and as really as there are grades above the primary, or as really as there is a period in the history of mental development characterized by a predominating activity of the representative powers, so surely has the text-book its place as a means of education.

It is contended that "the education of the child should accord both in mode

and arrangement with the education of mankind as considered historically." I take the ground that this principle is no more contravened by the use of school books than it is by the use of school-houses. How came speaking, and writing, and printing, and school books, and teachers, and school-houses? Were they put upon the race from the outside? Or did they not rather grow up out of the history of mankind, and are they not now a constituent part of the record? And what is it we call the race? Is it other than what it has been made by individuals? As a vast composite, is its nature other than that of the parts out of which it has been made up? We sometimes hear the race spoken of as a sort of independent entity that the education of the child must be matched to in some way. I view the matter in the opposite direction, and say let the child be educated according to the way that we see, looking at him as an individual, his mind naturally unfolds itself. The agreement of the work with the genesis of knowledge in the race will then take care of itself. We shall thus be putting into it the essential ingredient of which the historical order has been formed; and if the product shall prove to be different from what we think it will be found to be, we can only say it is so much the worse for the historical order.

We enter an old forest. The trees are strange and unfamiliar. Some are prostrate and decaying. Here is where one has lain and crumbled till scarcely a trace remains. Still others are growing, some large and some small. We examine them. We study the circumstances, manner and rapidity of their growth, noting any marked changes attending their development. We are led to think upon the historical order of things in that development. We consider where, whether upon the prostrate and decayed trunks or in the growing specimens, that order is most legibly written. We look and read it drawn out in living characters in the younger growths, who say to us: "Those dead forms lying there and others which have gone down before them and now form the soil deeper than history penetrates were never aught else than we are seen to be, in that nature which determines our becoming. They grew as you see us growing, and under the same laws. The historical order in our woody race running further back than a thousand generations of growths is only what you now witness nature making it to be in us." Then speaks another, a wise and philosophic one, the hoar of centuries upon its head, saying, "The genesis of growth in the individual must follow the same course as the genesis of growth in the race." That progress alone is right and safe which is steered by the wake of the race. A ray of profound moonshine, thought I.

The point of this illustration must be obvious. The lesson is that there can be no genesis of knowledge in the race other than that in the individual, that which is every day repeated before our eyes in the natural development of the mind from infancy to maturity. The former can by no possibility be other than the latter has made it to be. Now, we have based the use of the text-book upon what we have endeavored to show as natural in the evolution of the activities and powers of the mind. I am unable to see how it can be eliminated as a means in the school-room without annulling what appears to be a law of mind. The authority of the genesis of knowledge is found to be nothing in opposition, but wholly in sanction of its use.

So, recurring to our illustration in the opening of this paper, we are led to say that, as it seems to us, the kinds of nail we have to drive with the two instruments of oral and text-book instruction are quite different. And the question most profitable to us is how can we most successfully use the two

means, each in its appropriate place? There can hardly be a question as to which is the better in the school-room. To ask it suggests a type of questions familiar in the boys' lyceums; for example, which is the more indispensable end of a yard-stick, the one we measure from or the one we measure toward?

W. E. BELLOWS said:

I do not look forward to the banishment of the text-books from the public schools. To those who do, I must say you overlook one underlying principle, that, ultimately, the pupil must get his knowledge from its sources for himself. A system of education which ignores books in this age of books is radically defective. Except in the first two or three primary grades, the intelligent teacher will use the text-book, but will be greater than the book if equal to the subject.

The following points indicate a rational use of the text-book: 1st, throughout, the subject will be of more importance in the pupil's mind than the book; 2d, the lesson will be preceded, accompanied, and supplemented by the oral instruction of the teacher; 3d, the skillful teacher will be above and beyond the book, altering its substance and rearranging its parts, if not suited to his class; 4th, he will not allow the author's words to be taken with slavish authority, but will lead the pupils to submit everything to the test of experience and investigation, especially in the sciences; 5th, he uses the text-book best who has acquired the most outside of it.

AUSTIN GEORGE said:

I do not recognize any irrepressible conflict between text-books and oral teaching. All true teaching is largely oral. Oral teaching alone may do; text-books alone will not do, especially with young pupils. If pupils are left to themselves with a text-book, or if the teacher is a mere recitation hearer, it usually happens that many things in the book are not perfectly understood. It is of the greatest importance that the terminology of the text-books—the very alphabet of the science they treat of—should be thoroughly understood and mastered; every word should indeed have "an idea welded to it." The text-book, then, needs to be supplemented by the living teacher.

I was much struck with Prof. Bellows's illustration of the hammer and hand-axe—each good for certain purposes and having their respective places. Now we have a very common domestic tool that combines the virtues of both implements; I refer to the hatchet. With it you can cut and hew, and you can drive a nail or draw one. Now, in in our educational methods we need to "do it with our little hatchet."

HINTS FOR TEACHERS OF HISTORY.

BY MISS RUTH HOPPIN.

This paper has in mind teachers in public schools, and will treat of elementary work. Were pedagogical matters in proper trim, every teacher of history, even in our country schools, would have two essential requisites that it is safe to say few at present possess. Besides having a fair knowledge of the subject to be taught, mental laws would be so well understood that the teaching would be adapted to the mind of the learner and those faculties especially addressed

that must always be most concerned in this study. It would be understood that learning history involves something more than the mere memorizing of events and chronological tables. The memory would not be overloaded, the imagination neglected. It would be understood that in no study is there more need for critical and discriminating judgment; and though in the lower part of the work the discriminating ability of the learner is less appealed to, yet the work is to be so graded that such ability shall be more and more brought into play, and towards the last take its proper place.

Since the text-book question is not yet decided, may this essay add its word? Are the majority of our schools and homes so well provided with libraries as to make it possible for the average teacher to dispense with a text-book of history? Here we must deal with facts, not theories. How many teachers to-day without a text-book are able to make the study more than a mere fluttering from mountain peak to mountain peak, and will bring their classes down to the rich valleys which they deem dead levels? How many will fill in the wide gaps in a profitable way? If used, the text-book should be but the guide to the way, and not the way itself. To the teacher especially a guide only, her servant, not her master. She takes its statements for what they are worth; its methods must always succumb to her own.

What kind of text-book? Almost any kind if its statements are reliable, its English good, its style attractive, and the whole adapted to the capacity of your class. Two kinds are to be especially avoided, those little ones gotten up to suit the belief that, after all, there is a royal road to knowledge, and that promise to give a nation's life in one short school term. They are mere skeletons of facts, with meat and marrow left off and out. In them history has laid aside its flesh and is clanking around in its bones. Such books are and ought to be the horror of children. The other extreme includes those books that have not any bones, namby-pamby affairs, that, like some persons, are always making a desperate effort to be very sweet and very attractive.

As you expect a work of art only from an artist, so a work on history should be written by a historian, and by one, too, who is able to adapt his work to the needs of those who are to use it. How closely shall we follow the text-book, even if it be a good one? Over some periods closely; over others we should go outside and beyond. Some periods are to be studied, if at all, only as connecting links, whose purpose is to unite the more important. Over such we may take express train, saving our time for careful surveys of the important stations where delays are profitable. Here we will bring in collateral aids. There are many happy ways of making this collateral work a success. The same reading may be required of all, or it may be distributed among the class, each member being required to report on a special part of the work. The reports may be brought in as essays, abstracts, select readings, concise talks, or occasionally as short discussions. That the reports be not duplicates, and that each may have a direct bearing on the subject in hand, the teacher should assign to each his work, giving author, volume and page where the subject is best treated. Another way is to assign a short lesson and require after the recitation that each report something on the subject from outside sources, giving his authority with his report. Not the least gained in such exercises is, 1st, in what authors certain subjects are best treated; 2d, how to look up subjects for one's self.

That your pupils may rightly use these aids, early in the course they should be taught the use of dictionary, encyclopedia, maps and pictures; they should be required to keep by them note books to jot down authorities, references, etc.

So, besides showing them how this knowledge is to be gathered, you are teaching them where it is to be found. Should we follow the order of the text-book? Generally that will be as good as any. Beginners retain better the true sequence of events if, the first time over, the chronological order is observed. On the other hand, great advantages are gained in studying history by subjects. Both methods are easily combined by going over the ground the first time in the chronological order, then reviewing by subjects, or by making the advance topical and keeping the true order of time by a judicious use of chronological charts.

Naturally, here comes in the thought what subjects are of most worth. Not always those that most fascinate the boy or the girl, though it is best with beginners to select subjects sure to interest them. If your object is to create an interest in this study, and to direct the imagination away from fiction to fact, the stories of Alexander, of Pyrrhus or of Napoleon may be just the thing. But since one of the great purposes of the study of history is by the lessons of the past to learn wisdom for the future, and to discover the great forces and currents that have brought the nations to their present bearings; that those currents and forces may be charted and designated as guides for to-day, to-morrow and beyond. It must be conceded that some periods of history must be of much greater worth than others. Those that most plainly show fatal mistakes, the decline and downfall of nations, with attendant causes; those that show national development, the progress of a nation's life, in its literature, its religion, its morals, its political institutions, will claim most attention, and our plans should be laid to give such periods more thorough research and extended study.

While it may be a disgrace for any one to be ignorant of the general outline of our own country's history, special prominence should be given to subjects that illustrate the beginning, growth and narrow escapes of our national life. We need as a rule to study wars less and periods of peace more; generals less and particulars more. For instance, some indefinite vagueness is taught that goes by the name of history of the states, yet the child acquires no definite knowledge of his own state. Let this indefinite something alone; spend the time thus gained on the history of your own state; such history to be given in a few brief, graphic oral lessons by the teacher. The children should fill these lessons out by collateral reading. Have some read up Parkman on the early discoveries in Michigan; let others give special bits of Detroit history from Sheldon; others fill out the conspiracy of Pontiac from Parkman, Sheldon and Campbell. A series of reports regarding the war of 1812 may be brought in from Lossing, and a variety of subjects from Campbell.

If you are teaching in any place where there is any local interest, take advantage of such facts and inquire out particulars on the spot, no matter how much trouble it costs. If at Niles, the old fort, apple trees, and French cemetery are to be visited and their history produced. If at Ludington you will find no lack of interest if you set your class to find out just where the great explorer was first buried. In some of the towns along the great highway from Detroit to Chicago, if nothing else offers, you will be surprised to find how you can wake up your class by sending them to the "oldest inhabitant" to ascertain just where the Indian trail ran and for items of pioneer history. A previously sleepy class has been put on a wide-awake course of investigation by slyly hinting that once Daniel Boone was in Detroit. There is some shaking of the head at first, but much ransacking of books and study of maps, till the old backwoods hero is followed up and down streams and along trails that the

young folks had not before thought of, and from the study of this man they become interested in the expedition fitted out at Detroit during the war of the revolution to break up the Kentucky settlements, and they believe they can tell by what rivers and portages the expedition proceeded. Then instead of our own State's history being a blank, the wilderness and lone streams become alive with interest, and your boy is ever on the alert to fill up the vacant places.

There is not time for all this, do you say? Spend less time on De Soto and Ponce de Leon and put it on home history. Skim the general account of the war of 1812 and gain time to fill out a full picture of what occurred in Michigan and the vicinity. If to study Tecumseh you must neglect Philip of Pokanoket, pass by the New England chief. So should we give more time to Pontiac than to Osceola, to Mackinaw than to St. Augustine, to Commodore Perry than to Paul Jones.

As our books are arranged and as most teachers practice, too little attention is given to the early history of the newer states in proportion to that bestowed on the original thirteen. There is much about the old thirteen that children are made to harp over in a way that gives them no idea of the life of those colonies or of their development into a national existence. This teacher requires it because that one did. She never asks why or of what good, and if asked if Bacon's rebellion has any more to do with national history than the Toledo war, would open her eyes.

Now, if there is not time for everything, would it not be as well to give your class as clear an account of the ordinance of 1787, the northwest territory and its subsequent changes, as of Locke's Grand Model? and let your future citizens know as much about the purchases and conquests west of the Mississippi as you require them to learn of Rhode Island and Delaware? Boys and girls must have something about Indians; you know that it is good for the circulation of the blood. Why not give more about the western tribes, knowledge that will fit them, as citizens, intelligently to grapple with questions that now claim the most serious attention of all good men. Here again the books are wrong. No wonder teachers are bewildered. Of course many of the most important subjects in American history involve political questions too abstract for the average school-boy or girl, and yet it is a great pity that a majority of our citizens get only such distorted notions of those subjects as come through the medium of partisan newspapers, demagogues and stump-speakers. Would that American history could be elevated to its true place and have a little space allotted to it after the learner has reached sufficient maturity to realize its value and comprehend some of its great problems.

Well, after all, it is easy enough to choose your text-book, if you will have one, to choose your subjects and decide upon the order of taking them up, but the hard places are found when you set your pupils to work—your beginners—stolid and ignorant, from families where a book is never read, a paper rarely taken, an intelligent conversation never heard. Some of these without aid will not be able to learn or recite a lesson. There may be many ways of helping such in this work. Here is one way. Spend as many hours or days, even, as may be needed in helping them to understand the lessons; then spend as many more as you see are required in helping these learners to express these new thoughts in their own language. In all these days you make no effort to have them memorize what they go over, though they will remember much or most of it. This first work of helping them to get hold of the thought is done by having the pupils read the lessons intelligently, give definitions and explain paragraphs, look up geographical and other references, give illustrations by

words, by pictures, and by stories. Their attention is aroused, the imagination excited. They become so interested that each wants to tell the story. Then you will be able to enter on the second part of your work, the telling. This you insist shall be in their own language, book open or closed, just as the experimenter prefers. You let him talk the story or write it, but it must be in his own words, not a verbatim recitation. When some success is thus attained you are ready to assign lessons to be learned and recited. You may for a term or two be obliged to explain or give aid in advance on all lessons; and make them language lessons as well as history lessons. Unconsciously almost you will lead your pupil to weave the outside information obtained from encyclopedia, story or picture into his narrative and break up parrot repetition from the text-book. Suppose there is no encyclopedia in the school. Appoint a committee to consult one in the neighborhood, or give the address of some friend who you know will feel it no annoyance to furnish information to your eager young inquirers. Be sure to have some good reference histories of your own. Start a subscription, and give generously yourself, that a reference library may be owned in the school.

Shall the recitation be all narrative, or shall it be in answer to questions? There should be a due commingling and alternation. Questions to be used to awaken thought and arouse inquiry. Let not the narrative parts be spoiled by too many statistics. Let the two be judiciously alternated. The lesson loses interest even if one section is putting tables on the board while the other is reciting. There is more interest, more learned, when each reciter is made an instructor of all the rest. The correction of board work should be made when all can listen to it. Then the statistical part, charts, tables and summaries is less heavy when all seem lifting together, even though you are careful to make the work individual. You know the carpenter in the rural district is not left to raise the barn alone, but the neighbors are invited in and the heavy task becomes a frolic. So these disagreeable parts of your work are made pleasant, and therefore easy, through sympathy, emulation and ingenious variety. You do not try to see how many dates you can make your pupils cram, but some important ones are essential; so of other facts. To make these seem not like medicine, or worse still, a punishment, you resort to many little devices to make them go down easily. You put a list of dates on the board, require the pupils to give the associated events. Reverse the process. A little practice of this sort will enable each pupil to reproduce both unaided, either written or orally. Then make a game of the work, as in an old-fashioned spelling-school. Time forbids my giving here outlines of little games that rest a tired class and help to make the study a delight and not a drudgery. A question box, managed by the teacher, or better still, by a committee from the class, can be brought in as a recreation, it being always understood that no questions shall be asked that the questioners cannot themselves answer. Once a week ten or fifteen minutes may be given to recreation, which may be one week a game, another a question box, another anecdotes. For instance, at the close of the period of the revolution each will be expected to tell some story relating to that war that he has got outside of his text-book. In the history of Michigan each is to relate some story connected with the pioneer life of his own town, county or state. Of course these recreations are children's play, but they are designed, like play, only as a rest from labor. They are not expected to teach much in themselves; they accomplish their purpose if they relieve work of its irksomeness.

A few words about reviews. Where there is time enough, review each day is desirable, so that every lesson is recited twice. When a period is finished

there should be some sort of review, but it seems idiotic in this study to review every Friday or Monday simply because it is Friday or Monday. So much for when to review.

How? The old way, to repass the whole ground a little more briskly and with longer lessons, has its advantages; but the highest advantages of a review are not reached in this way. Compactness and system are best gained by means of tables, charts, summaries and abstracts. These, so far as possible, should be made by the pupil. Forms should be given him with due instruction as to filling out; but all the filling that can be reasonably done by himself should be so done. When he does it himself he performs an intelligent act. He will have no trouble to remember his own work. The proper preparation of a historical abstract is the pupil's most difficult undertaking; yet on the review he will gain much if you aid him to prepare such. Help he will certainly need.

It has been stated that history, properly pursued, should train the judgment, the discriminating ability. This training finds little place in the lower part of the work, the part that this paper promised to discuss. Even in our high schools students of history have neither maturity nor mental discipline that fits them to grapple with the great problems of national life or to pursue anything deserving the name of philosophy of history; yet there is a mode of study that such can well undertake which will bring into play an ability that the beginner cannot exercise. Such students are pursuing English history, the text-book arranged on the chronological plan, and subdivided into dynasties and reigns. On review you set aside this arrangement and go by subjects, so planning the work that the student must be thrown upon himself in carrying it out. First he may review all the wars, each on your plan, but himself picking out from various authors, and writing in brief, causes, between what parties, dates, through what dynasties extended, principal events, distinguished leaders, and finally the results of each war, stated in some concise and systematic way; as, for instance, the results as they affected the nation or nations at large, in transfers of territorial possessions, changes in laws, customs and languages, in military tactics, and national resources. Each pupil puts the result of his investigation on the board, all examine, criticise or commend. You advise changes, and all are directed to improve the same exercise for the next lesson. The second trial will be a great improvement on the first. Try this way of reviewing and you will be surprised at the variety of ability and judgment you will see displayed; and you will find, too, that he who has been your most ready reciter may in these exercises fall behind him who was slow in words. Is not that a proof that some new faculty has been brought into play? This little trial convinces you that you are in a good way and you go farther. You direct your class to take up the subject of the invasions and conquests of England, not only recalling dates, events, names of parties and persons, but tracing causes and effects, especially those relating to laws, languages, religion and civilization in general. Then similarly you would make the ecclesiastical and moral history the basis of review, giving special prominence to the reformation; and last, so far as time and the maturity of your class will permit, the history of constitutional liberty may be made the basis of review. In each case you give in advance a written plan according to which each is to arrange his outlines, these outlines to be filled out by the pupil, and when he comes to the class they must be so well in mind as readily to be put upon the board, so concise in statement as to be readily examined by the class and teacher. Individuality is encouraged; copying, borrowing, discouraged.

Why require your pupils to be to so much trouble when in a third of the time

they could memorize these outline reviews if teacher or text-book were first to do the condensing and arranging? The answer is, that this method keeps in mind that other faculties than the memory ought to be recognized and developed. You are to review modern history with a class in their teens. Ask them to write in brief what they think the most important events in the eighteenth century, with dates, making the basis of arrangement what each considers the value of the events. Few American boys and girls will fail to put first the declaration of independence, but after that what a careful weighing and comparing. It will be strange if in a large class any two will agree as to which should be second, and so on to fiftieth, should you ask them to proceed so far. Of course such a review as the last should only be occasional and carefully directed, else it might sink into mere child's play. But few of the subjects that might be introduced under the title of this essay have been discussed, but the limits of the article forbid more being said here.

DISCUSSION OF THE PRECEDING PAPER.

Miss M. LOUISE JONES said:

"One-story intellects, two-story intellects, three-story intellects, with sky-lights. All fact-collectors who have no aim beyond their facts are one-story men. Two-story men do compare, reason, generalize, using the labors of the fact-collectors as well as their own. Three-story men idealize, imagine, predict; their best illumination comes from above through the sky-lights." Much of the history teaching and history studying is mere fact-collecting; result, one-story men. True history teaching makes two-story intellects. Their possessors do compare, reason, generalize. Knowledge and character are growths. Growth comes by assimilation. Only by its own free agency can the intellect be enriched and invigorated. Hence the obvious duty of the teacher is to so lead the pupil that he will exercise his own volition in the pursuit of truth and be thereby strengthened. I know of no study in the high school course so difficult to teach satisfactorily,—difficult, because so important,—as general history. The college professor having but one or two branches to teach has time for thorough research, enough time for suitable preparation. We in the village schools, who teach mathematics, science, language and history have at best a meagre preparation and a divided interest for each department. So, I repeat, to teach general history in our smaller high schools is a difficult task. Do a little, but do that little well should be our motto. Nothing must be taught to be forgotten. The pupil must be trained to believe that what is taught and he is asked to learn is absolutely necessary for future use. The danger is that too much will be attempted. Only the most significent names, the salient facts, the general outline should be required. The pupil should never commit a page of history, never be able to give a paragraph, but always able to state facts. Some dates must be required. They should be few, far between, and, like surveyors' stakes, start from some place and lead somewhere.

Now, how all this is to be accomplished while the mind of the child still retains its originality and increases its power of assimilation is the teacher's problem. From a limited experience the following observations are deduced: In the study of the ancient monarchies we should consider: 1. The time when and the place where they began; 2. How their greatness was attained; 3. In

what it consisted; 4. The causes of decay. Under these subdivisions will naturally come the biography of the few noted persons, the peculiar style of architecture and its uses, the industries, social customs and religious beliefs.

Greece should be studied with special reference to differences between Asiatic and European civilization, and how the later born became the dominant power. Hence the Persian campaigns, Peloponnesian wars, and Alexander's campaigns demand much attention. Daily tabulations on the blackboard is the most effectual way of lodging them securely in the mind. Something of Grecian mythology, its games and festivals; the causes of Spartan strength in war; of Athenian keenness of intellect, delicacy of taste, and the skill with which they used them; of how Demosthenes became her greatest orator; of why the reign of Pericles was the golden age, will doubtless delight the school-boy and maybe awaken a new ambition or intensify an old one. A student rarely fails to enjoy this period of the history.

Rome, "lone mother of dead empires," claims a little time for her kingdom, much for her republic, more for her empire. Some comparing can here be done. The student is fairly versed in our own government policy, so that "each new law and political movement has a meaning for him." One will begin to perceive, dimly it may be, that every revolution was first a thought in one man's mind, and when the same thought occurs to another man it is the key to the era. Another will delight to watch the working of caste and its gradual decay. Another, a home-loving, society-enjoying girl, may note the home life, society or educational advantages of the Grecian mothers and Roman matrons. Though the plan of study in the teacher's mind must be worked up by all, such students may be asked to make specialties of these topics and bring in results. The research will be pleasing, the narration beneficial to the narrator and interesting to the class. Court originality in the presentation of these subjects. Each mind has its own methods. A true man never acquires by set rules. The wars for Roman consolidation, for power at home, for conquest abroad, solicit great care on the part of the teacher, much study from the pupil. Take down Victor Hugo and read "Two races—that of merchants and mariners, that of laborers and soldiers; two nations—the one dominant by gold, the other by steel; two republics—the one theocratic, the other aristocratic. Rome and Carthage—Rome with her army, Carthage with her fleet; Carthage old, rich and crafty, Rome young, poor and robust; the past and the future, the spirit of discovery, the spirit of conquest, the genius of commerce, the demon of war. The east and south on one side, the west and north on the other; in short, two worlds—the civilization of Africa and the civilization of Europe." Then ask yourself if the dryest text-book ever written can be uninteresting so long as this thought lies clear and definite in the brain of the teacher, no matter how prosaic and matter-of-fact she may be.

The period from 60 B. C. to 180 A. D. is of vital importance. "Cæsar could brook no equal. Pompey could suffer no superior." The triumvirate merged into a one-man power, and the empire began to be. Little if any persuasion will be needed to induce the class to consult the larger compendiums or the cyclopedias for a broad view. From this point study only the sources of the decline and fall of the Roman empire, pausing a little at its partition into the empires of the east and west.

So much for the pupils' work in ancient history. Now for the teacher's duty. The text-books are dry, but from them the facts must be gathered. Some talking, much questioning will be needed to fix the facts. To the student must be given a firm hold on what has been already learned. "It is no

less an art to retain what has been acquired than the first acquisition of it." The exercises must be so arranged as to involve repetition. Nothing once learned must be allowed to slip from the mind. In our talks with them we should aim to find "words apt to our ideas and ideas commensurate to our words;" to seek out just analogies and happy illustrations. I am inclined to think the teacher's talking day should be a red-letter day, and, like all other holidays, come rarely.

Review always by topics and follow with Socratic questioning of said topic and all collateral matter. This is the teacher's hardest task. Not anything must be told or explained now. The mind must be led to discover and trace relations and enter into truth as a legitimate conquest. The questioner will have to be master of her subject, know the mind of her pupil, and be able to anticipate and provide for the difficulties and wrong inferences that may arise in the lesson. The results of this questioning rightly conducted will be to fix knowledge already acquired, to deduce as new truths the effects of causes, and to awaken a desire to know a dozen new points hinted at by interrogation. Too much cannot be said of daily blackboard work and occasional writing of reviews on paper. Such reviews should never be on isolated facts. Always a collating, a comparing, a generalizing. We err if, so far as possible, we do not cultivate a taste for historical research. The pupils have not time to read extensively, nor is it wise to do so, since the aim is to secure clear, definite notions. Only a rare mind can by reading assimilate history; but the child with scratch block in hand can go over a given period even in ponderous tomes, note the salient points, weave them into his daily drill, and thus begin broad culture. Once interested in this, street corners and bowling alleys lose their fascination. Do you say we have no libraries? A town of less than three thousand inhabitants has, in three years, purchased over two hundred volumes of reference books with funds set apart by legislative enactment for that purpose.

This paper is not intended for a syllabus, hence of the Middle Ages we need only say in passing that the salient points should be noted. A year is all that can be given to general history; so much that is useful must be omitted for lack of time.

Coming to modern history, here the plan may broaden. France and England will serve as illustrations. There should be blackboard tabulations of important houses (Greene's plan in his short history of the English people is admirable), and of important events in each house. There should be a comparison of the great houses of the same nation as to a few striking similarities and dissimilarities; also a contrasting of the two nations during a given period, as: Plantagenets with Capetian line; Tudor with Stuart or Brunswick; Tudor and Stuart with Bourbon; Commonweath and Restoration with Louis XIV; English Revolution with French Revolution. By some such method as this the student will be ready to see that in the sixteenth century all the elements of European society had merged into two facts: the right of free inquiry and the centralization of power, one prevailing in religious circles, the other in civil society; that "emancipation of the human mind and absolute monarchy triumphed over Europe at the same time."

Having discovered this for himself, not from his text-book, but deduced from the facts therein contained, he will be able to determine that a collision of forces is inevitable.

The first battle field was England. It should first receive his attention. Not until the Tudor line did royalty declare itself absolute and superior to all laws, even those which it had said it was willing to respect. Thus the revolution in

England was the work of the monarchs themselves. The age of Elizabeth was one of great intellectual activity. Guizot says "It may be regarded as a maxim that whenever the progress of intelligence is a true pleasure, a desire for liberty is soon felt, nor is it long in passing from the public mind to the state." As a result of these two facts religious reform soon invokes political liberty. They join forces. The English revolution begins. Not so in France. Religious liberty was crushed by Louis IX, and put down by Louis XIV, who furnished the finest example in history of an absolute monarchy. The intellectual activity and spirit of free inquiry so characteristic of the age could not express itself in political institutions. There was but one, and he said, "I am the State." It could not exercise itself in a reformed religion, exhibiting its faith by its works. Thousands had tried it and died or emigrated. There was a complete separation of temporal and spiritual affairs. The nation gave itself to speculative philosophy, fashionable frivolity and extravagance of every kind. Tragedy and comedy were born. The Augustan age of her literature was in its prime. The monarchy grew old as Louis's hair whitened, and as political habits had died with its political institutions, a revolution here was also inevitable. Is not this knowledge a torch by which the student may readily read all subsequent history of these two nations?

This plan, if it be a good one, must lie in the teacher's brain. Step by step the student must climb from the dry facts to this high plane and thus enter upon truth as a legitimate conquest.

As in ancient so in modern history must there be daily blackboard work, short biographical sketches, constant tabulations of events, frequent reviews, rigid questioning. Excellent opportunities to suggest suitable reading for leisure hours will often present themselves. Is it the Briton or Saxon story? Shakespeare's King Lear, and Tennyson's Idyls of the King will please; for the times of Edward the Confessor, Shakespeare's Macbeth; for William the Conqueror, Bulwer's or Tennyson's Harold. By and by will come other plays of Shakespeare, Scott's Ivanhoe, Tennyson's Light Brigade and Ode on the death of the Duke of Wellington, Macaulay's essay on trial of Warren Hastings, Carlyle's description of the death of Charlotte Corday, Byron's Waterloo, Victor Hugo's Waterloo, etc., etc.

The results of this method ought to be, 1, clearly defined historical facts securely lodged; 2, a general outline trained into the student; 3, some ability to compare, reason, generalize, acquired; 4, a desire for greater knowledge awakened. And it may be possible that all future historical reading can be remembered, because it will fit into what has been previously learned.

THE PLACE OF TECHNICAL GRAMMAR IN THE SCHOOLS OF TO-DAY.

BY I. N. DEMMON.

Before proceeding with the discussion of this subject we must first determine what is to be understood by the term "technical grammar." We shall not know where to place the study until we have discovered its nature and scope. It is getting to be somewhat fashionable of late to speak of the English language as a "grammarless tongue," and to decry the study of formal grammar as useless and worse than useless. A popular writer of the day has recently

said: "English grammar is to all intents and purposes dead. The little life it had was so purely fictitious that one smart assault extinguished it forever. The time is coming, and it will be here ere long, when there will be no more thought of teaching an English speaking boy to use his mother tongue by grammar rules than of teaching him astrology."* But what does this writer mean by "English grammar?" "Grammar," says he, "concerns the forms of words and their dependent relations in the sentence." From this he argues that, as the English language has few inflections, it has no appreciable grammar. But because our language has few forms, does it follow that the relations of words are any less varied in our language than in languages that abound in forms? Because our nouns have no distinct forms to denote the relations of subject and object, does it follow that these relations do not exist for us, or that they may not be detected and pointed out? The Latin language distinguishes the accusative from the nominative by an inflection in masculine and feminine nouns, but not in neuter nouns; shall we refuse then to give these cases to neuter nouns while we allow them to masculines and feminines? The position that distinct form is necessary to distinct grammatical relation is untenable. The shallowness of all this talk about our language being "grammarless" is seen when we put this one question: Does the form create the relation, or the relation the form? Which is the essential thing? If in the study of Latin, or of any inflected language, we could make no grammatical distinctions where the form failed us, we should be crippled indeed. Every student of language knows that no language, no matter how highly inflected, begins to have distinct forms for all relations. The English language has comparatively few forms, but it is no less capable of expressing the infinitely varied relations of human thought. It simply employs prepositions, auxiliary words, and other devices in place of inflections. There is still the same room for the classification of words and phrases and clauses that there is in the most highly inflected language. "Technical grammar," then, I understand to be the classification of words, phrases, and clauses "according to their functions in the sentence," or what is commonly known as parsing and analysis.

What then is the place of technical grammar in the schools of to-day? Shall we retain analysis and parsing as an important part of our courses of study, or, following the course of our latter-day prophets, shall we exclude these exercises entirely? I hold that they should continue to have an important place in all grades above the seventh.

The fact that this study already has a prominent place in our schools is an argument in its favor. How comes it to be so important an element in all our courses of study? Is it there by accident? Is not its presence there the result of the best thought of men engaged in education for years past? Reasoning from this ground we should expect to find strong reasons for retaining the study. As has recently been said by one of our own number: "Any human institution that has grown to be what it now is through the efforts of succeeding generations of the wisest and best, has a very large element of unimpeachable truth in it."†

I shall now proceed to give briefly three reasons that seem to me to justify the continued prominence of the study of technical grammar in our schools:

1. The study affords one of the best, if not the best, means of mental discipline. Let us look at the process for a moment. The unit to be studied is the sentence. This sentence is to be taken to pieces and the relations of all

*"Every-Day English," p. xii.
†"Educational Weekly," Dec. 16, 1880.

its parts to the others pointed out and classified. Thus the learner is brought at once into the closest relations with thought. He cannot proceed a single step by rule. He must think for himself. No progress can be made till he has comprehended the meaning of the sentence. Hence we have at the outset and all the time, an exercise in interpreting language. The words and groups of words cannot be classified until their relations in the sentence are clearly seen. An ambiguous sentence cannot be parsed or analyzed till the ambiguity is resolved. An obscure sentence must first be made plain. Furthermore, the pupil has not in modern English the aid that he has in an inflected language, for here more depends on the thought and less on the form. Now, I hold that any exercise that best trains the pupil in interpreting language, is of the greatest value, and I believe that there is nothing else in the whole range of studies that gives such constant and excellent opportunities for this sort of training as does this very exercise we are now considering.

2. Every person should, if possible, study some foreign language. There is much truth in the sentiment attributed to Voltaire: "As many languages as a man knows, so many times is he a man." The study of foreign languages, both ancient and modern, is becoming very common,—none too common,—and, as is well known, to the study of any foreign language the study of English grammar affords an excellent introduction. A child may begin Latin or German without having studied English grammar, but the way is greatly smoothed by the previous study of English grammar. Every teacher who has studied or taught a foreign language will testify to this.

3. This study gives important aid in detecting and correcting faults of speech. It is true that we speak mostly from habit without reference to rules, but if bad habits of speech have been acquired in childhood how are they to be corrected? The mother is the best grammar only when she speaks correctly. The school must supplement and, in most cases correct, home influences on speech. This is not the place to propose a system of elementary language lessons, nor to show how every exercise from the primary school up should be made to contribute to accuracy and force of expression; but after all has been done that can be done, there still remains an important place for the study of the principles that underlie speech. These principles can be learned only by a careful analysis of a great variety of sentences with long-continued observation of the subtle relations of words. Grammar does not consist merely in seeing that nouns and verbs agree, or that pronouns have a particular form. It has to do with the choice and arrangement of words so that they shall not have a double reference. but shall express clearly and precisely the thought intended. There is no other way to test the clearness of a sentence so sure as to parse it. Will it parse? Can you analyze it? These questions are always pertinent in the criticism of any production, and afford the learner an excellent instrument for self-correction.

In what I have said I would not be understood as overlooking that other side of grammar commonly known as practical grammar or composition. The study of technical grammar should be preceded and accompanied by daily exercise in writing. Synthesis should accompany analysis. You cannot emphasize too much the cultivation of the art of expression. This is the great need of the schools to-day. What I have urged is that synthesis cannot safely dispense with analysis. The principles that underlie the structure of the sentence are best learned by analysis, and they constitute the only sure foundation for accurate and forcible use of language and for the correction of bad habits of speech.

Once more: books are the tools of the investigator. The investigator of to-day, if he is wise, first informs himself of the published results of previous investigations in the same field. This fact gives books the foremost place in every department of research. In art, in literature, in science, everywhere, we must use books. But books to be used must be interpreted. The interpretation of the printed page, therefore, becomes of the highest importance. Now, this great accomplishment does not come by nature. It is the result of long and patient toil. It is not so common an accomplishment as one would think. It is the business of the schools to give this accomplishment. Hence, all talk about teaching wholly or largely without books is shown to be vain. The interpretation of written language and the art of expression, or the study of language analytically and synthetically, must have the central place in every system of culture worth the name. Any system that does not give it this central place must eventually be rejected as a failure. We hear a great deal nowadays about practical studies, and the so-called bread-and-butter sciences are pushing forward and elbowing the humanities and letters. But this agitation will have its day, and after a while men will come to ask themselves again whether, after all, the knowledge of words, their history, meaning, and use to express the highest thoughts and emotions of the soul, is not quite as practical for all purposes for which men live as minute knowledge about bugs and snails and mosquitos. There is much that is curious and interesting in the study of natural science, and many valuable lessons to be learned in these fields; but they who would put these studies in the place of the studies that have been found most useful in training the great minds of the past, know not what they do.

I am aware that grammar is badly taught in the schools, perhaps worse taught than any other subject. The difficulty of the subject calls for a higher grade of teachers than do most other studies, and we should expect as a result to find more bad teaching of this subject than of any other. And yet I believe that it is seldom taught so badly as not to be of substantial service to the pupil. Text-books, too, are in many cases inferior, and this fact has, no doubt, had much to do in bringing the study into contempt; but they are not all inferior, and I think there is reason to hope for improvement.

What we need to-day is better text-books and better teaching of them. Both of these will come in due time. Meanwhile, let us keep the ground we have and jealously guard it against all comers.

NEEDED LEGISLATION.

Kind and Amount of Supervision Desirable for the Country Schools.

J. M. B. Sill said:

I think we should have the best kind of supervision and the greatest amount thereof that we can induce the State legislature to provide for.

What Extent of Territory Should Constitute the Unit for the Purposes of Supervision.

Austin George said:

In considering the amount of territory that should constitute the unit for *purposes of* supervision, it seems to me wise that we should first consider the

municipal organizations of the state. We find the lowest political unit to be the township, while the county is the next higher. They have each complete machinery of government,—executive officers, auditing boards, etc, and there is no territorial organization intermediate between the two. True there are representative districts, but these exist for a specific purpose; they have no municipal organization; they have but one officer and he a member of the legislature, which audits his accounts and pays his bills, and to which, in fact, he is responsible. Now experience has shown that for purposes of school supervision the township is too small. It has too little territory and too few schools to require the entire time of one man. The result is that the office of township superintendent is undesirable; no one wants it; competent men cannot afford to take it and attend to its duties for the limited compensation allowed, and so it is made a kind of township foot-ball and often falls into the hands of incompetent persons, or is accepted under protest by competent persons who cannot afford to attend to it.

The territory for purposes of supervision should be so large and the schools so many that a fair compensation could be allowed to the supervising officer without undue expense to the several districts, and thus good men could afford to devote their entire time and best energies to the business.

Z. TRUESDEL said:

In reply to Mr. Clark* I wish to say that he has been the township superintendent of schools for Highland, Oakland county, for the last six years, and that he is an efficient officer; that he took the schools as he found them when the county system was repealed, and has steadily improved them by holding institutes in his township and by granting certificates only to those teachers who are qualified. He has been able to secure the best teachers in the western part of the county since it has become well understood that unqualified teachers need not apply. But by his own admission his observation has not extended beyond the limits of his own township, and hence he has no means of judging of the efficiency of the present system throughout the state. In many of the townships of Oakland county persons have been granted certificates who could not pass an examination to enter the seventh grade of a good graded school. And there is a widespread dissatisfaction with the present system and a demand for a change. The principal cause of dissatisfaction with the county system as administered six years ago, was that it had too much success. It had elevated the schools. It had raised the standard of the teachers. That very fact had condemned it. Incompetent persons had been weeded out and competent persons could not be secured to take their places without increase of pay. From this increase of pay had resulted that manifest dissatisfaction with the system which caused its destruction. I believe a single examining officer will do more efficient work and will accommodate the people better than a board of three. Local feeling would make it necessary that the members of the board should be chosen from different parts of the county, and the board could be convened only on specific days for the examination of teachers or for listening to complaints against those whom the districts considered incompetent, and would of necessity put school officers and teachers to great inconvenience. And three men would be likely to have more favorites than one if any favoritism should manifest itself. Any system that will put a county under one supervision will be likely to improve the present arrangement.

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*Mr. Clark's remarks were not furnished for publication.

people than the present methods. Whatever may be thought or said by us in this hall, the body which is to hold its sessions here during the coming months, and which will have power to make and unmake systems, will be very sure to inquire carefully about the expense of any proposed legislation. And the good people in the various counties and districts who have chosen this representative body will be very sure to take careful account of the probable cost of any new methods of managing school affairs. So much will have to be kept constantly before us in this discussion and in our future efforts for the passage of desired laws. 2. Any proposed methods must not very seriously reduce or limit the local control and management of the schools and of school affairs. We may favor centralization of power; may feel very confident that better results could be secured by such centralization.

The people, as a body, in the various school districts of the State,—the people who are really to enact the laws which we wish for, not only will not sympathize with this idea of centralization, but will strenuously resist it. This resistance cannot be disregarded if we hope to succeed, nor is it the part of prudence to provoke a conflict in which we shall be certain to be worsted.

Keeping these two fundamental propositions in mind I venture to make a few inquiries and suggestions:

I. And first, I am inclined to believe that a plan or method for the examination of teachers should be considered and matured and urged apart, to a very considerable extent, from any plans for supervision of schools. While in an ideal state of affairs the two ought, without doubt, to be very closely united, yet under existing conditions I think more can be accomplished by seeming, at least, to disregard the connection between the two. Any amount of machinery and all possible supervision will fail to make good schools without good teachers. Give us first properly instructed and qualified teachers and the rest will come sooner or later. I would, consequently, aim to secure the largest practicable examination district, so as to secure uniformity of qualifications in teachers over the widest practicable extent of territory.

My impression is that a board of examination of three persons for a county, or, if possible, for two or three, or even four counties, would be desirable. This board should not only examine teachers but cause them to be instructed in respect to methods of teaching, organizing and managing schools, and should have power to require certain reports from the teachers, either directly or through a township officer. The board should, of course, have power to revoke certificates, and to inquire into cases of failure and dissatisfaction, etc. The action of such a board would not, to any serious extent, interfere with any local authority of townships or districts.

How this board should be chosen or appointed I am not now considering, or for what length of time its members should hold office. These are subjects for separate examination, as are also the questions of organization and specific powers and duties. The general outline is all I am attempting to suggest.

II. In respect to supervision, etc., I venture merely a suggestion or two.

Our experience under the county superintendency law proved very conclusively that one man cannot supervise the schools of an entire county in such a way as to make his supervision of much real value. Our experience under the present law, as well as under the old system of township inspectors, seems certainly to indicate that township supervision is of very little value.

The county is too large and the township too small apparently. In the one case the field is too extensive and in the other not extensive enough to occupy the time

and energies of a supervisor. It seems, therefore, probable in the light of our experiences, that some territory intermediate in extent between these two would be best for purposes of supervision of the schools and of the instruction. It may be that a representative district, in most cases, would be as near to the right size as any of the divisions existing in the State. This suggestion is made on the supposition that the work of supervision within given limits can be most efficiently done by one person. For, while I think, on the whole, that examination should be made by a board, I think also that supervision is best done by one individual.

The general examining board should probably have some power to supervise, to some extent, the supervision, so as to make the whole work, as far as possible, uniform within their district.

While the State department should have, of course, a general directing authority over the various examining boards, so as to make the school work of the entire State reasonably uniform and harmonious. Time does not permit me to inquire now as to the election or appointment of these officers.

Relation of the Superintendent of Public Instruction to the State Educational Institutions.

W. H. Payne said:

By some species of legislation the sphere of the Superintendent's active power should be considerably extended. Through the Normal School and the Institute he may now have a more or less direct influence on the education given by the State; but these cases excepted, he is limited to the giving of good advice. The State Superintendent is the nominal head of our educational system; below him there is an army of subordinates, charged with the duty of examining teachers and supervising schools. Yet, by a strange anomaly, these subordinates are released from all direct control by their superior. The Superintendent should be much more than a clerk, and much less than an autocrat. And it would not seem to be a very difficult feat of legislation to give our educational department a degree of centralization that would make it tolerably efficient, and at the same time allow the subordinate members of the system an ample field for the exercise of their versatility and individuality.

THE NEW BOTANY.

BY W. J. BEAL.

Before fully considering the new botany, let us glance at the old. Aristotle, Pliny and other Greeks and Romans paid some attention to plants. So did the Arabs of the twelfth century. Still later, Grew, Tournefort, Ray, and many others studied plants and wrote about them. A little progress, and but very little, was made in classification and description.

Not until the last century, about 1735, less than 150 years ago, did botany begin to take rank as a science. This was largely due to Linnæus of Sweden,

who well earned the title "Father of Botany." His efforts were largely devoted to describing and classifying plants, and were ably continued by the four Jussieus, Robert Brown, A. P. De Candolle, Lindley, Endlicher, and their contemporaries.

Except for medical students, botany hardly found a place until within the past forty years. Even in the higher educational institutions, and as late as 1850, botany was usually only considered a pleasant and proper pastime for young school girls.

As generally pursued, the study consisted mainly in learning from a book the forms and names of roots, stems, leaves, inflorescence, and the several parts of flowers and fruits. The teacher was supposed to be a dried up old fossil. He wore odd looking clothes. He taught the class from the text-book, and preferred to pursue the study in winter, that pupils might learn the names and peculiarities of plants before they appeared in the spring. There were many hard, unfamiliar names. With no specimens to illustrate the lessons and a dry teacher, most of the pupils acquired a thorough disgust for the study, long before warm weather furnished materials for illustration. It is little wonder that botany found so little favor. Some teachers went so far as to require pupils to copy the pictures on a blackboard.

In time, spring flowers appear and the pupils are supplied with them. Each may have a cheap microscope, which he is compelled to hold in one hand. The teacher and class hastily and superficially run over the various parts of a plant. They all turn to an artificial key and wade through this part of the book till the teacher says, "We have found the order to which the plant in hand belongs." They turn to the page for the order and proceed till they come to the name, which may be *Claytonia Virginica*, *Hepatica triloba*, or *Ranunculus fascicularis*. And what next?

"We have found the name of the plant." The pupils have merely had an introduction to the stranger in the most formal manner. The teacher can suggest nothing further for the pupil, except that it would be a good plan for each member of the class to collect specimens, press, dry them, place in a portfolio, and give each a label on which is written the Latin and common names, the habitat and time of flowering. The pupil has been taught that it is all of botany to learn the names of all the parts of a plant, or the parts which are not too small to be easily seen with a cheap hand glass. Mysteries are still unsolved and the plant is still a stranger. We ask it no questions; we receive no replies. We have only glanced at the exterior. Such is the mode of study which can no langer be palmed off as valuable training.

From 1770, to about 1800, Wolff and Goethe of Germany and A. P. De Candolle of France developed new ideas of plant morphology. Schimper, Braun, Dunal and Rœper aided in this work; but to no one are we more indebted for accurate information in regard to the difficult problems of plant structure and affinity than to Robert Brown of England. He was the most profound botanist of this or of any age. In this country, Dr. Gray has long been foremost in developing and popularizing the subject of plant morphology, which, for twelve years beginning with 1850, may be said to have been the leading idea in botany.

The year 1862 will ever be memorable as the date in which appeared the classic works of Mr. Darwin on the fertilization of Orchids. He caught the first glimpse of the subject from Sprengel, but to Darwin more than to any one else are we indebted for the light thrown on the subject of fertilization of flowers. Delpino, Ogle, Hildebrand, Bennett, Hooker, Lubbock, Kerner, Fritz

Müller and Hermann Müller and a host of others in Europe and America, aided in rapidly making new discoveries in the same direction.

In connection with this, many interesting discoveries have been made in reference to the motions of plants in climbing, catching insects, etc. Carnivorous plants have been examined and experimented upon. New modes have been discovered by which plants are distributed in various parts of the globe. From 1862 to 1875, in this country, what Gray calls "How Plants Behave," may be said to be the dominant feature in the science of botany.

In 1875 appeared the English translation of the grand text-book of Julius Sachs. In following him understandingly, one must employ a good compound microscope and considerable other apparatus. He must make many experiments to become familiar with the structure and development of cells, tissues, external conformation of plants, and their physiology. Two years later appeared the translation of another similar work by Otto W. Thomé.

Already during 1880 we have an excellent work similar to that of Sachs by an American scholar, Prof. C. E. Bessey. This is convenient in form and size and can be had at a price within the reach of students.

Original investigators keep in advance of text-books and make the materials for them. We still have all that is valuable in morphology, classification, geographical distribution and many other things, as well as all that pertains to the topics last named. The field has become too large for any but specialists. In making a selection, we should choose those topics which will afford the pupil the best training to fit him for original work.

For young pupils, object lessons are very popular for a while, but in most cases the interest soon wears away. As too often managed (I may say as usually managed), object lessons consist in short lectures with specimens in hand, with some questions plied to the pupils without time for previous study or preparation. There is too much pouring in and too little worked out by the pupil. It brings forth the combined information of all the members of a class, but it adds little or nothing by way of research. To be really appreciated, a student should earn his facts in the study of biology. What I have called

THE NEW BOTANY

began to appear in this country in 1862. It includes a study of the subjects as set forth by Darwin, Sachs, and others above named in the same connection. It also includes a new or better way for students to learn the botany of our forefathers. In this we study objects before books; a few short talks are given; the pupil is directed and set to thinking, investigating, and experimenting for himself. To be constantly giving information in science makes intellectual tramps, and not trained investigators.

Teaching the new botany properly "is simply giving the thirsty a chance to drink." It also creates a thirst which the study gratifies, but never entirely satisfies. This plan, in a general way, has been again and again brought to the attention of our best teachers, some of whom are carrying it into practice. I will now enter into details as briefly as possible, and try to mark out a plan which may assist some who are always looking for the best way. Specimens are essential; a green-house or a botanic garden are useful even if they are small, but almost every neighborhood will furnish materials in abundance, which may be found in the fields, woods, and by-ways.

Before the first lesson, each pupil is furnished or told where to procure some

specimen for study. If it is winter, and flowers or growing plants cannot be had, give each a branch of a tree or shrub, which may be two feet long. The examination of these is made during the usual time for preparing lessons, and not while the class is before the teacher. For the first recitation each is to tell what he has discovered. The specimens are not in sight during the recitation. In learning the lesson, books are not used; for if they are used, no books will contain a quarter of what the pupil may see for himself. If there is time, each member of the class is allowed a chance to mention any thing not named by any of the rest. The teacher may suggest a few other points for study. The pupils are not told what they can see for themselves. An effort is made to keep them working after something which they have not yet discovered. If two members disagree on any point, on the next day, after further study, they are requested to bring in all the proofs they can to sustain their different conclusions. For a second lesson the students review the first lesson—report on a branch of a tree of another species which they have studied as before. Now they notice any point of difference or of similarity. In like manner new branches are studied, and new comparisons made. For this purpose, naked branches of our species of elms, maples, ashes, oaks, basswood, beech, poplars, willows, walnut, butternut, hawthorns, cherries, and in fact any of our native or exotic trees and shrubs are suitable. A comparison of the branches of any evergreens is interesting and profitable. Discoveries, very unexpected, are almost sure to award a patient study of these objects. The teacher must not think the time is wasted. No real progress can be made, till the pupils begin to learn to see, and to learn to see they must keep trying to form the habit, from the very first, and to form the habit they should make the study of specimens the main feature in the course of training. In nearly all important cases specimens are examined, and a need is felt for a name or a definition before these are given. The use of technical names is not avoided, nor are these "thrust upon a student." They are learned as they are needed—a few at a time from the teacher or a text book. Common terms for science are usually too indefinite in meaning to answer a good purpose. The difficulty of learning technical names is often much overestimated. The discipline required to learn them is itself worth all it costs to any one.

After from four to ten lessons on small branches the following points and others, or answers to them are brought out. Is there any definite proportion of active and dormant buds in any year? Where do branches appear? Is there any agreement in growth, as to length of branch, and the size of the annular ring each year? Is there any similarity of rapid or slow growth of all the limbs on a branch in each year? Is there any certain number of leaves on a year's growth, or any definite proportion between the lengths of internodes? Can the smallest old dormant buds be made to grow? Is there any order as to what buds grow, and what remain dormant? How much, and on what years did each limb grow? There are three ways of telling the age of a branch—by the bud rings, stem rings, and color of the bark. The shape, size, color, degree of smoothness and other peculiarities of buds on any branch, and the leaf scars are made out. The arrangement and position of the buds and bud scales are learned. Is there any order in the arrangement of the specks on a branch? Do the specks change as the branch grows older, and if so, how? How many leaves each year were required to build up the branch? How large were the leaves and the amount of surface exposed for a certain branch? Did the amount of growth in any year correspond to the number of leaves on the twigs and main axis? Does the ring of wood depend on the growth of the

main axis? In this connection pupils may take up phyllotaxis by the study of cones, catkins, etc., not forgetting to examine a large number of specimens of one species.

The pupils are now ready for a book lesson on buds, branches, and phyllotaxis. They will read it with interest and profit, and be able to make many additions, and very likely point out some errors in the text book. Pupils must be careful about drawing hasty conclusions. Because a plant grows or behaves in a certain way in Central Michigan, it is not always safe to conclude that it will do the same in New Jersey or California.

I have gone somewhat into detail, in this case, of the lessons with branches. In like manner, any other topic or the subject of a chapter in the book may be first taken up by the study of some specimens, as roots, seeds, fruits, stamens, petals, sepals, leaves. For beginners the following flowers, if they can be had, will be excellent: buttercup, cranesbill, trillium, berberry, flax, pink, violet, mustard, potato, sage, bergamot, lilac, cherry, apple, serviceberry, Missouri currant, snapdragon, pea, vetch, strawberry, rose, iris, the flowers of poplars, willows, maples, oaks, hazels. After a day, two, three, or more of study of the specimens pertaining to one topic, then comes the study of the book. Even with the shortest and most elementary course, a study of some of the specimens by all of the class should precede a study of the text.

I place very little stress on investigating a number of chapters in the definite order as given in a text book on botany. For example, it makes little difference whether a pupil begins with a study of petals or stamens, buds or roots, leaves or pistils, but it is quite desirable after beginning, not to abandon any one of of these topics till many of the various forms have been thoroughly studied. It is possible to classify and divide a topic till you take all the life out of it. A young man of eighteen will begin and pursue the same course as a child of ten, only he will progress faster and go deeper. Almost any of the above topics, and hosts of others are admirably well adapted for descriptive compositions. I usually give each student one or more of them each term. For the youngest students this year, the following topics will serve as examples: Compare the leaves and young branches of the Scotch pine with those of the Austrian pine; or black spruce and Norway spruce; sugar maple and red maple; butternut and black walnut; any two species of poplars. I have here on the table the compositions prepared last year by the young beginners in botany. I made no corrections in the spelling or grammar, but met each student and heard him state his main facts before writing them out.

(See American Naturalist, January, 1881.)

As students advance in morphology and systematic botany, topics for other themes are assigned, of which the following may serve as examples: He studies the living plants, and makes his notes. To him it is just the same as original research, and not unfrequently young students, in this way, make discoveries new to science. For example, he studies the arrangement and development of the parts of the flower with reference to its self-fertilization, or fertilization by insects, birds, wind, or by other means. Here are plants suitable for such study: Moth-mullein, dog-bane, sage, thyme, red clover, plantain, milk-weed, mallow, thistle, cleistogamous flowers of the violet, campanula, iris, lobelia, martynia, Indian corn, wild balsam. One studied the vines of dodder; one, the climbing of Virginia creeper; one, the twining of the wild morning-glory; one, the tendrils of the cucumber; one, unequal lobed leaves; one, the time of opening and closing of flowers; several, the development of some irregular flower; one, the order of dehiscence among anthers of

a flower; one, the honey glands of some flower; some, the glands in other parts of plants than flowers; one grew beans in pots containing all sorts of soil, and with more or less light; one experimented on the germinating power of weevil-eaten peas; one, the relative order of development of stamens and pistils of many plants of Indian corn; one, for what do ants visit plants? In most cases it was necessary to give brief hints to the students to set them to work intelligently. The theses were made up from original observations and experiments, and drawings, and were read in the class room. Here they are on the table, with all the imperfections, just as they wrote them. Teachers can well make use of such topics for the pupils to write about. In some respects, topics like these are better for theses than those usually assigned, in which students must consult books for information. A study of such topics for theses is equivalent to enlarging a library.

During five-sixths of the academic year in which our students have daily lessons in botany, full three-fourths of the time is given to the study of plants in some form or other. The books serve for reference and reviews.

I have been quite particular to indicate the course pursued, because some think it is difficult. Aside from collecting specimens, which can often be entrusted to an advanced student, it is an easy way for a teacher when he knows how to proceed. But little time need be occupied with lectures; short talks of ten, fifteen, or twenty minutes are occasionally given. I have taught zoölogy and physiology in the same manner. Students are thus at once put in the way of becoming independent and reliable observers and experimenters. They are trained more than they are taught. As the New York Tribune says: "Teaching communicates ideas; training forms habit. Teaching imparts knowledge; training develops power. In teaching, the adult explains words; in training, he shows methods. Under teaching, the child hears what is said; under training, he sees what is done." And I may add, he learns to do it himself. "Training is food which gives strength to run."

In the whole course in botany I keep constantly in view how best to prepare students to acquire information for themselves with readiness and accuracy. This is a training for power and is of far more value than the mere information acquired during a course of study in natural science.

Of all the natural sciences, botany is the best for beginners. The materials are everywhere abundant and inexpensive. Many parts of plants are more interesting than minerals; less complicated and pleasanter to handle than animals.

For the benefit of young teachers, I will now give in an informal way a large number of topics which are suitable for students to investigate. A teacher can select such as he likes, not all, of course, and after using some, others will suggest themselves to him. Any text-book should suggest many topics to a teacher. In connection with these topics I will make comments or give hints as to mode of procedure.

Set pupils to raising or collecting seedlings of maples, oak, basswood, beans, peas, morning-glory, sun-flower, radishes, wheat, flax, squashes, onions. Let each study one species at all ages, then another or more and carefully compare. Most seeds can be neatly started for this purpose between folds of thick paper or cloth kept warm and damp. Boxes of clean sand are also good. To learn whether the different parts of a seedling, as radicle, ascending axis and roots elongate alike, prick with ink a row of spots at equal distances along the side and let them grow a while longer for further comparison. Grow seeds suspended over water with roots in water. In beans, peas, peanuts, cut off much

or all of the cotyledons at different ages to see the result. Cut off tip of plumule to see whether buds will come in the axils of cotyledons.

Dig very carefully to trace the depth and extent of roots of clover, wheat, corn, any weed or cultivated plant in various soils, light or heavy, wet or dry.

The structure of the seeds may well be studied and compared in connection with their germination in any young plants. To the above seeds, I will add seeds of catalpa, trumpet-creeper, milk-weed, apple, violet, cockle, wheat, oats, barley, chess. See carefully where the smallest roots come from in corn and in squash or pumpkin, bean or pea. It is a good plan for a beginner to repeat some simple experiment which he finds described in some book. Let one or more compare the runners of strawberries of many varieties, potentillas, buttercup, beef-steak saxifrage, and any other plant which has runners. Work out the morphology of the tendrils of grape-vines, Virginia creeper, smilax, cucumber, pea, etc. Work out the morphology of spines of various sorts by hunting up intervening forms. Compare the diverse forms of stipules in prickly ash, locust, dock, sorrel, clover, tulip tree, beech, oak, and trace the stipules from very small rudiments to maturity. Observe the position of flowers in the bud while open and when dead; also the position of the fruit, as peas, violets, columbine, etc. Compare two or more rhizomas, as Solomon's seal, iris, blood-root, sweet flag, quack grass or June grass. Compare the tubers of artichokes and potatoes; the bulbs of a lily and onion; the chips of any two kinds of wood, or sections of wood made in different directions, as any oak, ash, beech, maple, pine. Collect and press sets of leaves, arrange and paste on to cards. Give each a name and name the shape. Study and draw many kinds of leaf scars. Study the development of some leaf from a very small rudiment to perfection, as pea, ash, basswood. Study leaves of arbor vitæ, pines, spruces, larches. In spring clip off the ends of young branches of pines and see how and where buds develop during summer; the same with peach, beech, maple, poplars. With the aid of a stage microscope, study and draw the position of scales and leaves in a bud, as cherry, violet, basswood, etc.; also the buds of flowers, as mustard, spiræa, asclepias, evening primrose, fuchsia, baswood, oxalis, phlox, violet, lobelia. Do not forget to notice the tip of the bud before opening. Examine a large number of specimens and make drawings of a cross section of each distinct mode or form. Let a young pupil study all the parts of a head of flowers of dandelion, aster, or coreopsis; also double flowers of roses, fuchsias, petunias, geraniums, flowering almond. Compare the fruit of a strawberry with a rose hip and a geranium; the anthers of some two species of compositæ, lobelia, mallow, obutilon, lupine, berberry, spice bush, sassafras, huckleberry, squash, sage, lily, grass, violet, tulip, spring beauty, buttercup, milkweed. Compare the pistils or fruits of some two of the following: mandrake, cowslip, columbine, cherry, bloodroot, trillium, flax, portulacca, iris, melon, pea, bean, maple, ash, elm, acorn, horse chestnut, plum, apple, cranberry, huckleberry, gooseberry, currant, raspberry, blackberry, fig, wintergreen, mulberry. Try to trace out the morphology of each.

From spring and during summer examine every few days to see how the bulb of adder-tongues is formed. Grow young roots on clear glass to see if they corode the surface. Carefully pull or take up stools of wheat or chess or oats to find, after washing, the kernel from which the stool grew.

Remove stamens before the buds open, and by protection for a day or two get ready and cross-fertilize or hybridize two sorts of strawberries, raspberries, gooseberries, currants, apples, wheat, corn, etc.

The Fertilization of Flowers.

Remarks on this topic have already appeared on the previous pages, with some subjects for study. Most botanists believe, whether it is true or not, that honey is placed in flowers to attract insects which are needed to fertilize them. Flowers are the advertisements to draw insects. Honey is the wages received and compensates insects for their visits. "The lines and circles on the corolla guide them to the right spot. To them we owe the beauty of our gardens, the sweetness of our fields. To them flowers are indebted for their scent and color, nay, for their very existence, in its present form."—[Lubbock.] No topics are more attractive to the young student than some under this heading. Watch insects on the flowers of melons or pumpkins to see how they behave and transfer the pollen. Tie up or cover the pistillate flowers to see if fruit will form without pollen on the stigma. Cut the petals from some flowers to see if bees or other insects can find them readily. In many cases, a crossing of flowers has been found necessary for the production of seeds; in most, it is very beneficial. Try it and see. Try a flower with its own pollen and another with pollen of another flower. For experiment and observation our native plants are the best if we study them with reference to our native insects.

The wind aids in the transfer of pollen in some cases. Study pines, spruces, larches, birches, oaks, hazels, hickories, grasses. Are these flowers showy, or do they secrete honey? Always notice the condition of the pollen, whether dry, in grains, strings, etc. What parts of a flower secrete honey? See pæony, buttercups, hellebore, pulsatilla, caltha, pointsettia, and others. Observe stigmas after pollen has been applied and where none has been applied. What do insects gather, nectar, pollen, or both of these? Observe time of day when certain flowers open and close, and see whether they open more than once. See the dandelion, white water lily, evening primrose, oxalis. What insects visit each flower? Study flowers of willows, poplars, and see what attracts insects. In every case, observe whether the stamens and pistils are ready for each other on any flower at the same time, or whether one set of these organs precedes the other. With this hint study epilobium, angustifolium, thyme, lobelia, compositæ, companula, mallow, amorpha, scrophularia, plantago, pink, geranium. In some violets and oxalis look late in the season for flowers without petals above ground and below ground. Examine carefully for pollen, seeds, etc. Look in flowers of the closed gentian for bumble bees. Any flowers of the mint family are excellent for study in relation to fertilization by insects. What insects visit flowers of the umbelliferæ, as parsnips, carrots, and the like, and how do they behave?

Some species are dimorphous. They have plants, different specimens of which have different forms of flowers. Some have two forms of flowers, so far as their stamens and pistils are concerned. In some cases it has been found that the long stamens are best to fertilize the long pistils, the short stamens to fertilize the short pistils. Try this on primula, mitchella, houstonia, bouvardia, polyanthus, auricula, and look elsewhere for flowers with the same peculiarity. A few are trimorphous. See Lythrum salicaria and Pontederia cordata. Hunt for others. Experiment by crossing a pistil with pollen from stamens of different lengths.

In geranium pratense there are two sets of stamens. They advance and retire from the stigmas at certain times. See Tropæolum, and also whether this is true of any other flowers. Valisneria spiralis and anacharis grow in the water. In a still place look for pollen below water in the flowers and the stigma at the surface. Study up the whole subject.

Study the structure and modes of fertilization of all the species to be found of any large or small genius, as viola, rosa, spiræa, epilobium, lobelia, ranunculus, aquilegia, berberry.

See and study the sensitive stamens of the berberry. See whether the weather or time of day affects the supply of honey in any flower. In shade or damp air honey may appear when not seen in dry air or in the sun. Study the changes which take place in the development of different parts of a flower with reference to its fertilization by insects or otherwise. Changes sometimes occur in a very short time. Quickly brush the stamens of portulacca to see them move in the opposite direction. Try to find other flowers which will behave in like manner. See where and how an insect alights on a flower, how it gets in and gets out, and where it begins and leaves off on a cluster of flowers, as peas, amorpha, mullein, veronica virginica. How does pollen get out of flowers of compositæ, lobelia, etc.? Are the stigmas of a head or spike all ready at once? Is the pollen all ready at once? See also dipsacus and scabiosa. Is nodding any benefit to flowers? Look for appendages to anthers and inside of corolla, and study their use. Where are the holes in an anther when at rest and when visited by insects? See many ericaceæ, as vaccinium and kalmia. Study sensitive stigmas to see how they can be of any use in aiding a cross. See utricularia, pinguicula, catalpa, martynia, tecoma, begonia, mimulus.

Do any insects gnaw into flowers? See bumble bees in pedicularis and flowers of labiateæ. Orioles sometimes pinch flowers of Missouri currant for honey. Do any flowers catch and hold or otherwise torture insects, and is it in any way an advantage to either? See asclepias, apocynum, drosera, martynia, vinca, cirsium, oltissimum, nemophila. Study carefully the date and length of time of flowering of timothy, June grass, Indian corn, or other plants. Besides those named, the flowers of the following are also excellent for study with reference to the agency of insects or birds in fertilization, viz.: nymphæa, nuphar, sarracenia, poppy, polygala, silene, chickweeds, hypericum, flax, basswood; all cruciferæ, mignonette, euonymus; all rosaceæ, as apple, pear, quince, plum, cherry, strawberry, spiræa; also œnethera, ribes, parnassia, rhus, acer, staphylea, aesculus, cornus sambucus, lonicera, cephalanthus, vibernum, galium, campanula, convolvulus, pulmonaria, ipomæa, scrophularia, snap dragon, linaria, fox glove, and all other scrophulariaceæ. All leguminosæ are excellent; all verbenas, phlox, physalis, petunia, datura, buckwheat, hydrophyllum, sassafras, benzoin, gladiolus, iris, smilax, lily, tradescantia.

Through a season look for humming birds on flowers; make inquiries of others, and keep a list of such plants. See especially fuchsia, impatiens fulfa, trumpet creeper. Examine the flowers and the birds for small insects, pollen and honey.

The Unwelcome Guests of Flowers.

There are many truly wonderful contrivances in flowers by which a cross is secured. Certain insects are not only welcome but allured to make visits. Other insects which from any cause can be of no advantage in fertilizing plants are often kept away by various means. Dr. A. Kerner of Innsbruck has written a very suggestive book on "Flowers and their unbidden guests." This has been translated into English by W. Ogle. He has in many cases observed the presence of differently directed hairs and viscid glands which prevent the access of certain insects and not of others. He took the hint for all of his book from a single suggestion of Erasmus Darwin, and perhaps also from Mr. Belt. Many of our native plants have never yet been studied in reference to

this part of the subject. The closed gentian admits the bumble bee, which can benefit it, but keeps out ants and many others which would be of no advantage. Pedicularis keeps unwelcome insects away by a narrow corolla, by hairs and awns on the stamens. Small snails and slugs are often kept away by bristles on the plant or flower. Experiments could be made by removing hairs in some place and placing a snail on the plants. A few snails could be placed inside a Wardian case and certain plants in flower introduced. Aphides or plant lice may be studied in this connection. They like sweet. Do they get it from flowers?

Of all wingless insects, ants are perhaps the most active and the fondest of sweet; yet they seldom get much honey from flowers. Look over many kinds of plants and watch the manœuvers of ants to see where they go, what they do and why they go no further. Remove some nectar from flowers and place near ants; take away some obstructions and watch the ants. See if ants can enter some wilted or old flowers, as snap dragon. Prop open fresh flowers of snap dragon and watch for ants. Thrips are small, slim, active insects which cannot fly. Watch them about flowers, as in compositæ.

Large animals avoid some plants on account of an unpleasant taste, leathery foliage, prickles, or thorns. Do cattle eat the fresh flowers of plants the leaves of which they are fond? Will they eat flowers dried, as in hay?

See isolated plants in water; make a bridge to them for lice or ants. See dipsacus lacinatus and silphium perfoliatum, with water in the axiles of the connate leaves, which serves to keep unwelcome insects from the flower; also a cluster of flowers arising from water held in the leaves of many bromeliaceæ. See if dew keeps any insects away, or if some flowers are open only when the dew is on? Study polygonum amphibium grown in water and out of water to see if all have protecting hairs alike. Study viscid gum to learn the use on buds of populus, alnus, betula, iuglans, æsculus. Study robina viscosa or any others with viscid glands.

Kerner holds "that the position, direction, and shape of the leaf is of just as great significance for the preservation of a species, as form, color, and smell of the flower; and that no hair is meaningless, whether found on the cotyledon on the leaf, on the stem, or the blossom; that it is rare that any part of a plant is so shaped as to be suitable for the attainment of but one end. Usually 'two birds are hit with one stone;' nay, often three or more." See the viscid secretion on the internodes of lychnis viscosa. What insects are caught? Place bridges over for ants. Look for glands or nectar on the leaves or petioles of pteris aquilina, ricinus, gossypium, poinsettia, helianthus, viburum opulus, cow pea, acacia, vicia sativa, runus, cassia, the fruit of tecoma radicans.

For viscid glands or hairs see thistles, mulleins, geranium, ribes, circæa, eryngium, calyx of labiateæ, scrophulariaceæ, phlox, verbenas, mallows, physalis, menyanthus, vinca, tropoeolum. Force ants or other insects to crawl up a panicle of flowers of asclepias and lettuce and see the milk exude; also hieracium, nabalus, and sonchus. On the inside of flowers see how far it is true that hairs, etc., act as path-finders to welcome insects. What parts of flowers produce the hairs?

In some cases access to flowers is impeded by parts of the plant or flower being bent, dilated, or crowded together. In this connection study linaria, cynoglossum, antirrhinum, solanum, ericacæ, campanula, cactaceæ, potentilla, geum, œnethera, aconitum labiateæ, calceolaria, convolvulus, cruciferæ, scrophulariaceæ, many leguminosæ.

Carnivorous Plants.

Some plants have been found to be carnivorous or insectivorous, as drosera, dionæa, pinguicula, martynia, and perhaps pelargonium, primula, tomato, tobacco, petunia, verbena, several pitcher plants, the small bladders of utricularias. Verify any of the above suggestions by experiment. Irritate tentacles on the leaves of drosera, dionæa. Apply to any of the above, water, sand, meat, milk, acid, salt, ammonia, chloroform, starch, sugar, etc. Apply heat and cold.

Motions of Plants.

All plants move more or less, while parts of some move quite rapidly. The leaves of leersia in a warm day close up quite rapidly if stroked between the thumb and finger. The stamens of portulacca move when brushed suddenly. Observe the details of movements and repeat the jarring of the sensitive plants (*Mimosa pudica*). Observe the position of the leaves of any other plants day and night, as in tripolium, melilotus, oxalis, robinia, cassia, desmodium. See if these can be made to recognize artificial light and darkness. Turn some plant occasionally in front of a window and note carefully the results. Make drawings.

Climbing by Roots.

Carefully study the climbing by roots of English ivy, poison ivy, trumpet creeper, etc. Where do roots first appear on a young stem? Experiment with small mirrors placed in different positions about the stems. Look for liquid or mucilage on roots. Let them stick to glass to see if it is coroded. See how some plants are held up by hooks or bending of the stem or leaf, as tomato, some species of galium, polygonum, rubus, leersia, rose.

A good twiner is said to always turn one way only. Look at many specimens for exceptions. In a twiner observe the twist of stem and where it twists, at what age or part. See what the stem does when it arrives at the top of a straight stick, and stick inclined at various angles. Observe the revolutions at different times of day, warm and cold. Make diagrams of movements. What does it do when it hits an object? How far does it reach? How many internodes are active in the movements? Try to reverse the motion. Wind up a part while young and study the rest. Study some one certain internode from the time it is very small till fully grown. Unwind a twiner to some extent and study. See if an old stem is uniformly twisted when the stake is straight and when inclined. Study the shape of the young tips of a vine. Take the support out of a coil to see what it will do. See how large a smooth stick a vine can climb. Make a cross section of the stem. Examples of plants are tomato, hop, honeysuckle, morning-glory, bindweed, beans, wax-plant, wistaria, celastrus, aristolochia, lygodium, menispermum, apios, jasmine, solanum dulcamara. In case of

Leaf Climbers,

see how they climb, what part of the leaf moves and clings. Do the leaves move so as to be seen? Experiment on small and large sticks. Make diagrams of cross section of the petiole of a leaf. Observe the changes in any part of a leaf after it sets. Examples of leaf climbers are clematis, tropœolum, solanum jasminoides, tomato, nepenthes, cobæa, pea, vetch, fumaria, adlumia. In case of

Tendril Climbers,

trace out the morphology of the tendril, whether it is a flower cluster or a real stem axis. Irritate in some way a tendril and study the result. Observe the shape of a tendril when young, its length, size, how long before it coils if it reaches nothing, how fast it coils if it reaches an object. What does the end do? If a tendril begins to coil back of the top, how does it perform? Observe the coils of many tendrils and draw them after they have coiled. What is the advantage of such coils? How much weight will a *set* tendril hold? Do tendrils in shade and damp air secrete a gum? Why do not tendrils coil on their own main stem from which they branch? The latter alone is worth much observation. Observe the tendrils of a squash vine after it has spread out on the ground. Tear it loose and see what happens. In case of Virginia creeper, use bits of glass to see if a tendril can stick. Look for a gum. How long will it remain sticky? What becomes of a tendril if it catches hold, or if not? How many branches has each sort of tendril? How do young and old tendrils of smilax behave? Irritate a young tendril of a squash or wild cucumber in a warm part of a warm day and see if it moves. Wait and repeat several times. Observe any other points. Examples of plants are bignonia, wild cucumber, melons, squash, pumpkin, grape, Virginia creeper, passion flower, mikania, smilax.

How Nature Sows Seeds.

If grains with awns in the chaff can be had of any species of stipa, aira, trisetum, danthonia, avena, andropogon, sorghum, alternately moisten and dry them and watch the motions. Erodium (found in California) is also excellent. In a dish of loose sand stick in close together a lot of straws to imitate stubble; place the seeds on the surface; alternately wet and dry them. Erodium, stipa, and avena hirsuta, and perhaps others may work into the sand, *i. e.*, bury themselves.

Seed Distribution.

Make notes of any cases of distribution of seeds or fruits actually seen. Some examples are given for study: impatiens, brasenia, seeds of pines, spruces, tulip tree, maples, ashes, elms, thistles, dandelions, basswood, birch; those with hooks, as bidens, burdock, coreopsis; seeds of tecoma, catalpa, desmodium, echinospermum, cynoglossum, geum, circæa, clematis. See how fleshy fruits distribute seeds by aid of animals which eat them, as seeds of apples, hawthorns, cherries, haws, cranberries, blackberries, raspberries, huckleberries, strawberries, gooseberries, currants. See how nuts are carried, as acorns, walnuts, butternuts, hickorynuts, hazelnuts, beechnuts. Watch some fruit of witch hazel as it is dried near a stove to hasten drying; also pods of the pea, bean, wistaria, geranium, violet, oxalis, etc. Observe seeds of milkweed, poplar, willow.

In studying up any topic great stress should be placed on good drawings. Count all the parts. Examine many specimens. Examine young and old as well as mature specimens. Observe the relative size of the parts. Observe the relative order of parts. Make many comparisons of specimens of the same species with those of kindred species.

For further topics and suggestions a teacher can consult any of the following works:

How Plants Behave—A. Gray.

Concerning a Few Common Plants—George L. Goodale.
British Wild Flowers in Relation to Insects—Sir John Lubbock.
Climbing Plants—Charles Darwin.
Insectivorous Plants—Charles Darwin.
Nectar, Its Nature, Occurrence, and Uses—Wm. Trelease.
Flower Object Lessons—M. Emm. Le Maout.
On the Mode of Distribution of Plants—Albert N. Prentiss.
Flowers and their Unbidden Guests—A. Kerner, translated by W. Ogle,
Numerous articles and notes in the American Naturalist, and the American Journal of Science and Arts.

To enter into details in reference to the method of learning morphological and physiological botany as treated in the text-book of Julius Sachs would carry me much beyond the limits of this essay. For such work each student needs a good compound microscope, with some other apparatus. My favorite method is to require each pupil to study all the parts, or all that his time will permit, of some one plant, to make accurate drawings and notes. A good plant for this purpose is the common pumpkin. If there is time after this course, let the pupil work up some one topic, investigating the corresponding part of many plants as the stomata, trichomes, spiral or reticulated vessels, starch, crystals, nucleus, streaming motions of protoplasm, grains of pollen, seive tubes, glands, fibro-vascular bundles, tips of roots.

GENERAL DISCUSSION.

To What Extent do the Strictures of Charles Francis Adams* Apply to Michigan Superintendents?

W. H. Payne said:

Mr. Adams's remarkable article in a late number of Harper's Magazine is inspired by Mr. Walton's report on the condition of the schools in Norfolk county, Mass., or rather on a review of this report in the Chicago Times. Mr. Walton makes it appear that these particular schools are shockingly bad, and Mr. Adams not only attributes their extreme badness to incompetent supervision, but on the *ab uno disce omnes* principle he makes the schools of Norfolk county the type of American public schools in general, and then proceeds to discuss school supervision as it has been, as it is, and as it ought to be.

Mr. Adams's style of wholesale denunciation is deserving of attention. He characterizes the country school of the past as "the beastly old common school," and he speaks of the modern graded schools as "huge mechanical, educational machines," and describes the modern superintendent as sitting "in his central office with the time table, which he calls a programme, before him, by which one hour twice a week is allotted to this study, and half an hour three times a week to that," etc., etc. That in the past there may have been some country schools that were "beastly," is possibly true, and that there are to-day some graded schools that "are organized, as nearly as possible, as a combination of the cotton-mill and the railroad with the model state prison," is also possibly true, but to insinuate, as Mr. Adams does, that these descriptions are anything more than very gross caricatures, is a libel.

*See Harper's Monthly for November, 1880.

Mr. Adams distinguishes three phases in the development of school supervision: 1. The material, the exponent of which is "the four-square school house and the separate desk." 2. The *pseudo* intellectual, in which "an intellectual subject was mechanically dealt with." 3. The scientific, or final phase, in which Mr. Adams seems to imagine that there is to be a happy release from time tables and programmes.

With this brief statement of Mr. Adams's theory of supervision, the question as to the extent to which his strictures apply to the administration of public school officers in Michigan, admits of easy answer.

1. So far as our country schools are concerned, there is, as a rule, no supervision whatever, save of the order called material by Mr. Adams; that is, there is no supervision that affects intelligently, wisely, and surely the intellectual life of the teacher and the school. We have no "beastly" common schools; but these schools, for the most part, are uninfluenced by skillful supervision of the scientific type.

2. In point of supervision, our graded schools, as a whole, have not only passed into the *pseudo* intellectual stage, but many of them have gone beyond it, and are fully in the scientific stage; that is, in many, and I believe in most of our larger graded schools, supervision, acting through an efficient organization, affects the intellectual life of the school intelligently, wisely, and continuously. These schools have not outgrown, nor will they ever outgrow an articulate, compact organization; but these organizations are inspired and moved by intellectual fires and purposes. When Mr. Adams has devised a plan of railroading without time tables, he may hope to invent an art of school supervision without programmes and courses of study.

W. S. PERRY said:

Considering the absurd statements, the more absurd reasoning, and the amazing ignorance exhibited in the article under review, I feared, when I saw this subject on the programme, that we were dignifying it too much in thus allowing it a place in our discussions. Certainly, if such a paper had been presented here by one of our own number, it would have fallen flat, and passed in silent contempt. But coming from so high a source perhaps the crudities and exaggerations of the article demand exposure, and I am not surprised to see its author gibbeted in every recent educational assembly in the land.

Withal, there is a modicum of truth in the article. As a basis for the author's strictures, he charges that our highest institutions of learning do not recognize any science of mind development, of general education. Law, medicine, dentistry, mining, agriculture, and even theology, have each their special schools, professors, and bodies of doctrine, but not so, general education. No science of it is taught; none is even accepted. Well, isn't this all too true? Has it not been one of our annual plaints? Have we not listened to papers, addresses, and arguments, to prove that we are a profession? How was the establishment of a chair of pedagogy in the University heralded over the State and nation as one of the first recognitions of general education as a science by the higher institutions of learning? Does not empiricism yet hold the field too largely in the great majority of our public schools? I fear that Norfolk county could be duplicated in many parts of Michigan. I have, myself, seen in one of the large cities of the west, the "sergeant drill," "company front," style of superintendency in full possession of the schools.

The great mistake of Mr. Adams is in supposing that the sun shines only in Quincy. Indeed, it does seem to have only just risen there. But there are some features of Mr. Adams' ideal school at Quincy that may well challenge

our admiration and following. Allow me to refer to a single one—the teaching of expression. In this respect the public schools are very inefficient. The strictures of Mr. Adams and Grant White on this point are fairly taken, however ill-founded in other respects. We have, in most of our schools, far too little writing. The pen and pencil ought to become facile instruments for expression in the hands of our pupils before they leave school. It is not recognized as it ought to be that drill in accurate expression contributes much to the growth and ready action of nearly all the mental powers. Indeed, language is a fair index of character, both individual and national. Education has been well defined as "ideas and their expression."

Now, while Mr. Adams seems yet to see through a glass darkly, we expect that, with enlarged experience in this (to him) new field, with a broader and closer observation of the teacher's work, he will become a valuable coadjutor in the cause of education.

A METHOD OF TEACHING PHYSIOLOGY.[1]

BY A. J. COOK.

[Abstract.]

The great value of the natural sciences in the course of study for our schools and colleges is well demonstrated in the fact that they have not only made for themselves a place, but have really gained a first place in the curriculum of all our first colleges and universities, and this in the face of universal usage and extremest prejudice. The cause of this great change is very obvious. Men well grounded in the knowledge of natural science, if we judge from their achievements, are quite as thoroughly disciplined as those who have confined their attention to literature. While from the practical tendencies of their knowledge, they are better fitted to cope with the obstacles which are sure to be met all along life's pathway.

Physiology, and especially human physiology, must ever rank among those sciences most worthy our attention. Physical health and strength are among the most desirable possessions. To conserve these we must understand the functions of the various organs. Were the truths of physiology thoroughly known by the masses, the abatement of disease and suffering and the increase in human longevity would be exceeding great. This fact is in part appreciated by our various school boards, as is shown by the generous place given to this study even in the lower departments of education. And if the time thus used were spent most wisely, we should see even greater interest in this subject.

In examining students from our district and high schools I often meet those who can speak fluently of the various bones, can locate the several viscera, and can even discourse upon the functions of the cerebrum, the medulla oblongata, and the tubercula quadrigemini. Yet most of these same pupils can not tell the lungs from the liver, or the spleen from the kidneys. They are totally ignorant of how any of the organs or viscera look, and their knowledge—mere book knowledge—has simply filled them with names and crude ideas, while the real facts of physiology are still a sealed book to them.

Now, I would have this all changed. I would have the pupils, even in these district and graded schools, see the various parts of the body just as they appear in life; I would have them see the location of the several systems of the body, and have them handle the organs, so that they would not be powerless with syncope at sight of a little blood, when perhaps the life of a fellow mortal demands the most thoughtful activity.

I am not now calling for any impossibilities. To be sure our pupils can not have a cadaver, nor would this be best for our purpose, even were it accessible. While we are sure that man is but a little "lower than the angels," spiritually, we are just as certain that he is but little higher than the monkeys physically. But we can not even get monkeys. Were we Chinese we should doubtless prefer rats for our anatomical researches. Were we simply acting from patriotic motives we should as certainly select dogs for our study. But after much experience I have decided that cats offer the greatest attractions to the teacher of anatomy and physiology. And it is surprising how great is the similarity between the human frame and that of our little feline victims. Each shows us the humerus, radius, ulna, carpal, meta-carpal and phalanges. Nor is the similarity in other parts less marked than that of the arm. Even the muscles are less modified from the human type than we could believe. My pupils have used Gray's Human Anatomy with surprising success in working out the muscles of the cat. The form, position and structure of the brain, heart, diaphragm, liver, spleen, and kidneys are in general almost identical. In the cat we see the heart incline to the left, the stomach and spleen on the same side, while the great liver lies just posterior to the diaphragm on the right, the windings and relations of the small intestines and the large are exceedingly like the same in man. And we wonder if we have not observed incorrectly, and look again, as we find the left, instead of the right, kidney farthest from the head.

As already stated, I have found these animals most desirable for anatomical demonstration and physiological illustration. They can be had at very slight cost, and usually for the asking. Hence if our pupils wish to dissect quite elaborately they need not keep a subject till it becomes offensive from decomposition, but can take a fresh specimen as often as is desirable. The cat is small and can be conveniently handled, and may be dissected on a small board or table. The size of the cat makes it possible to put it in a small, close box, where it may be killed or rendered insensible to pain by a small amount of chloroform, and at a very trifling expense. By thus etherizing the specimens we may cut them open while they are still living, and demonstrate the peristaltic action of the stomach and intestines, the pulsations of the heart, and even the character of the jets of the blood from the heart or large arteries by inserting a metallic tube while the heart is still pulsating, and all this with no pain to the animal. This entire absence of pain is worthy of emphasis. Let none of our laboratories be described as was that of Mairons Alfort, by Hamerton, "A hell of horses punished for no sin." The striking similarity structurally between the feline and human corpus, is another strong argument in favor of the cat for the purposes in question.

Advantages of Such Study.

This work done by the teacher before the pupils, and if possible carried farther by the pupils themselves, gives to the latter, not a dim, feeble impression of the appearance, structure, position and function of the several organs, but a real thorough knowledge of the same. He learns the laws which govern

the healthy action of the various organs and systems, and will be much more likely so to act as to preserve his health and strength. He learns the positions and character of arteries, and becomes able to ligate and so may be able in case of accident to save life.

Apparatus Needed.

First the teacher should procure a tight box, with close fitting cover, in which to chloroform the subject. The box should be only just large enough to hold comfortably the largest sized cat. A glass set in the cover will enable one to see when the animal is fully etherized, or when it has ceased to breathe. For demonstration before a class, and for dissection a board should be used, which should be about fifteen inches wide and nearly twice as long. This should be hinged to a second board of the same size, so that it can be raised up at a considerable angle, that we may better illustrate to a large class. Straps or chains to stretch the legs of the subject are valuable additions to this piece of apparatus. Any one can make one of these boards in an hour's time, and to the demonstrator no less than the dissector it will prove a valuable auxiliary.

Regular dissecting instruments, which may be purchased for from $2.25 to $5.00, are very serviceable in these demonstrations. With these we have knives, hooks, stretching chains, scissors, and forceps. But we can use a good sharp pocket knife, and extemporize our hooks by sharpening one end of short pieces of wire, which may then be bent into the desired form. Some small chains, which may be procured at any hardware store, will serve to stretch the legs or body walls. With this extemporized dissecting apparatus we have only to add some strong shears—old ones are just as good—to cut the cartilages of the ribs, and some sharp-pointed scissors to aid us in fine dissections, and we shall be ready for business.

To show the arterial system, the veins, and the valves of the heart and veins, we must resort to injection. We are thus able to illustrate most beautifully the wondrous net-work of arteries, and will present a picture to our pupils which will not only greatly interest them, but will ever remain with them. Suppose you try to describe the circulation at the base of the brain, without any demonstration. Your time and labor are wholly wasted. Show a pupil a brain, with the cerebral vessels well injected, and you have little to add, and yet he knows all about the wonderful "circle of Willis." Let the pupil once see the great arch of the aorta with its branches, the mesenteric arteries with their myriad ramifications, and you have given a lesson more valuable than a whole week's study of the unillustrated facts of the best written text book.

For our purpose, nothing equals a colored preparation of plaster of Paris for making injections. I use red for the arteries and blue for the veins.

For the arteries, take one-eighth of a pint of the finest plaster of Paris and and to this four-fifths as much carmine solution and one-fifth as much acetic acid. The carmine solution consists of ten grains dry carmine dissolved in 50 c. c. of ammonia, to which is added 50 c. c. of glycerine and 500 c. c. of water. This liquid, because of the glycerine, restrains the plaster from setting for twenty minutes, so that there is ample time to make the injection before the plaster hardens.

For the veins, we use one-eighth of a pint, 100 c. c., of plaster of Paris, and the same amount of Berlin blue solution, which is made as follows: To 500 c. c. of a saturated solution of Berlin blue add 50 c. c. of glycerine.

To make the injections we need a syringe. The Britannia syringe used by veterinary surgeons is cheap and serves admirably for the purpose. We also need a glass canula, which tapers to a small slender tube at one end, and a rubber tube to connect the nozzle of the syringe with the canula.

To remove the brain, the common chisel-edged nippers to be had in any hardware store are most valuable.

By use of a large bottle, whose bottom has been replaced by very elastic india rubber, and through the cork of which are passed two tight-fitting glass tubes, we may illustrate most graphically abdominal respiration. The outer end of one of the glass tubes should fit closely into a short rubber tube.

By aid of a Graff's battery, which runs by use of bisulphide of mercury, and which may be set in operation in a few minutes, we can show the functions and other most interesting points concerning the nervous system. These batteries cost about eight dollars, but they can be more cheaply borrowed of some generous enterprising physician. In nearly every little village there is one physician or more who has one of these little batteries, by aid of which he hopes to startle some of his suffering patients into good health. Perhaps you may succeed in making them do as much, if not more good, by procuring their aid in demonstrating to your pupils the wondrous actions and reactions of the most marvelous part of the animal body.

Method of Feletomy Detailed.

First the cat must be secured. A suggestion of our need to our pupils will usually provide us a score. Just before we wish to commence our demonstration we place our subject into the etherizing box and turn in about a tablespoonful of the anæsthetic. We may use either ether or chloroform. The latter is quicker in its action, but is far more apt to bring speedy death. So if we only wish to render our feline assistant insensible, that we may show the heart's action, etc., we must either use ether or pay very close attention to the progress of the anæsthesia. This affords us a practical hint of vast importance, that ether is much safer than chloroform to administer to the human kind. As soon as the cat is dead or thoroughly etherized it is to be removed from the ether box and stretched on the dissecting board. If it still breathes, and we wish it fully dead, it requires but a moment, with a sharp awl, to pierce the medulla oblongata, which instantly causes death. If we wish to show the heart's action we must remove the cat from the etherizing box before death, but surely not till she is fully etherized, and as soon as she is stretched on the dissecting board, cut through with a knife in the median line just in front of the diaphragm into the thoracic cavity, being careful not to cut the viscera, and then with our cartilage shears cut all the costal cartilages. This lays the cavity of the thorax wide open. The cavity may be further broadened by use of our stretching chains. By cutting the pericardial membrane the heart is brought fully to view, and will beat for several minutes. Of course breathing is impossible, and so circulation will soon cease; but by inserting a bellows into the trachea and supplying artificial respiration the heart will pulsate for a long time. We may also regulate the vehemency of its action by varying the respiration. By inserting a tube into the heart the blood will be seen to spurt out in interrupted jets, while the stream from a tube in the aorta is continuous, but pulsates with the beating of the heart. By touching with the poles of our battery, or even pinching the great phrenic nerve which passes as a great white thread along the descending vena cava and over the heart, the diaphragm may

be made to contract most energetically. By touching the electrodes to the intercostal muscles we may demonstrate most graphically their action and functions. The same is true of any other of the muscles. By touching the great muscles of the legs we may produce a startling effect. By galvanizing the nerves, or the cut ends of a divided nerve, and then the muscles, we get a vivid lesson as to the different functions of the nerves and muscles, and the fact of mixed nerves.

By laying open the abdominal cavity immediately after death we observe the peculiarly beautiful and interesting motion of the intestines, which characterizes peristaltic action.

We may next illustrate abdominal respiration as follows: We take from the rubber-bottomed bottle already described the cork with its two glass tubes, and having already carefully dissected out the lungs and trachea, we stretch the latter over the bottom of the glass tube which has not the rubber tube at its top, and tie it securely, so that the weight of the lungs may not draw it off, and then replace the cork in the bottle. Now, by pushing up the rubber at the bottom of the bottle with the hand and then allowing it to straighten again while we close the rubber tube above the cork, the air will distend the lungs, and our pupils perceive a most beautiful illustration of respiration.

To demonstrate the arterial or venous systems, we will find it easiest to inject either the thoracic or abdominal aorta and venæ cavæ. Those portions between the heart and diaphragm, and between the kidneys and forks of the vessels will be most accessible. After carefully dissecting the vessel to be injected away from contiguous tissues, we raise it slightly with a hook, and pass a thin narrow strip of hardwood beneath it, upon which we cut with a sharp knife a slit lengthwise of the vessel. We also pass two short strings about the vessel and loosely tie them by use of the surgeon's knot. We next insert the glass canula into the slit, and closely tie the vessel about it by use of one of the strings. This string, after being tied closely about the vessel and canula, is also tied to a second string which holds the canula into the rubber tube; this keeps the canula from slipping out of either the vessel or the rubber tube. We next prepare our injecting liquid, as already described, draw it into the syringe, then insert the syringe nozzle into the rubber tube, tying it as we did the canula, and also tying closely the two strings at each end of the rubber tube. We now, with steady motion, force the plaster mixture till the piston of the syringe refuses to go further. We next draw tightly the second string which was passed about the vessel. This keeps the still liquid mass from flowing out as we remove the canula, which is readily done by cutting the string which held it. We now force the liquid still in the syringe into the bowl from which we drew it out, quickly rinse the syringe and canula thoroughly with clean water, and then repeat the work with the canula pointing the other way in the vessel. With a little practice it is easy to inject both ways with the same lot of plaster before it troubles by hardening. If we have been successful,—and very soon we shall feel sure of success,—we shall have the pleasure of seeing even the finest arterioles,—the merest threads,—reaching around the intestines and stomach, or pushing into the spleen and kidneys, and will understand as never before the position and relation of the ever-present arterioles to the various tissues.

To understand the structure and parts of the brain, it is specially necessary to remove it intact; and when so removed, if nicely injected, it is, indeed, a most beautiful and interesting subject of study. But all who have tried its removal know that it is no easy matter. The brain of a cat is more easily

removed than that of any other of our lower animals, except it be that of a calf or lamb, just at birth, before the cranial cartilages have fully ossified. First, remove the head from the body, then disarticulate the lower jaw, and remove the large muscles that move the jaw; next hold the head bottom up in one hand, and with the nippers, held in the other hand, proceed carefully to tear away the bones, and by using great caution, we may secure the brain still wrapped in its membranes.

Thus we have our subject in condition to dissect, and the value of a careful dissection, even though the pupil is not particular to follow out every muscle, blood-vessel, and nerve, is greater than any one can know until he has interested his pupils in the work.

I hope that this talk may induce some of you to take steps to secure its benefits in your schools.

HISTORICAL SKETCHES

—OF—

EDUCATION IN MICHIGAN.

HISTORICAL SKETCHES OF EDUCATION IN MICHIGAN.

INTRODUCTORY.

In every department of life it is useful, at times, to review the past, in order that we may properly understand the present, and be better enabled to make intelligent advancement in the future. Believing that a retrospective view of the progress of education in the State of Michigan would be conducive to good, these sketches, which are largely a compilation from various reliable sources, have been prepared.

It is a source of gratification to every friend of American institutions that changes of power in the political departments of the government bring with them no diminution of interest in relation to the instruction of the rising generation. Education is a subject of paramount importance with all, differences of opinion existing only as to the modes by which the widest blessings may be bestowed, and the most enduring results secured. It is a peculiar characteristic of the American people, and more especially of that portion by whom, for the most part, the states of the Northwest were settled, that they have ever contributed of their means, whether scanty or ample, for the benefit of education, with a liberality and zeal which deserve our gratitude, and which will forever deserve the gratitude of posterity. The early settlers of our common country were willing to stint themselves, and to submit to every hardship incident to their settlement on the shores of a new world, that by these means future generations of men might find no excuse for the encroachments of ignorance and vice and despotism, in their neglect to provide for the means of universal free education. It was the sagacity and forethought of such men, which, by an ordinance of the Congress of the Confederation, in 1785, laid the broad foundation of free education in the munificent appropriation of the one-thirty-sixth part of the public domain for the use of schools forever. There were few at that time, in

the vast region we now inhabit, who could be the recipients of the benefits offered by that ordinance. Neither as yet had the strong arm of the government been thrown around the settlement of the country to secure its protection. It still remained for the Ordinance of 1787, providing for a temporary government of the territory, to give to the previous act its first impulse and to infuse into it its first vitality. By this ordinance the provisions of the grant of 1785 were respected, and it was further declared that "religion, morality and knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." In 1804 an act was passed providing for the sale of public lands in the Indiana Territory,—of which Michigan had become a part two years before, on the admission of Ohio as a state in the Union,—and in this act section sixteen in every township was expressly reserved "for the support of schools." In the act of 1805, organizing the Territory of Michigan, all the rights secured by previous acts and ordinances were confirmed. The act of 1836, by which Michigan was admitted as a State in the Union, stipulated "that section numbered sixteen in every township of the public lands, and when such section has been sold or otherwise disposed of, other lands equivalent thereto, and as contiguous as may be, shall be granted to the State for the use of schools." From these various acts we can readily perceive the unwavering purpose of "the fathers" to foster and perpetuate intelligence and the means for its dissemination among the people. How the builders of our State have respected that purpose and protected the legacy given them, these pages may aid in showing.

ORGANIC LAWS.

The several ordinances and acts of Congress, to which reference has already been made, constituted the first organic laws of the Territory. During the year 1835 the people of the Territory adopted a Constitution and formed a state government, and in the following year Michigan was admitted as a State in the Union. It is to be regretted that the proceedings of the first constitutional convention have not been preserved, so as to be accessible to public inspection. There was, however, no debate in relation to the importance of making suitable provision for public instruction. A committee was appointed to draft an article of which Isaac E. Crary, of Calhoun county, was chairman. It was reported on the second day of June, 1835, and was adopted substantially as it came from the hands of the committee. The following is the constitutional article adopted in 1835:

EDUCATION.

1. The Governor shall nominate, and by and with the advice and consent of the Legislature, in joint vote, shall appoint a Superintendent of Public Instruction, who shall hold his office for two years, and whose duties shall be prescribed by law.

2. The Legislature shall encourage, by all suitable means, the promotion of intellectual, scientifical, and agricultural improvement. The proceeds of all lands that have been or hereafter may be granted by the United States to this State for the support of schools, which shall hereafter be sold or disposed of, shall be and remain a perpetual fund, the interest of which, together with the rents of all such unsold lands, shall be inviolably appropriated to the support of schools throughout the State.

3. The Legislature shall provide for a system of common schools by which a school shall be kept up and supported in each school district at least three months in every year; and any school district neglecting to keep up and support such a school may be deprived of its equal proportion of the interest of the public fund.

4. As soon as the circumstances of the State will permit, the Legislature shall provive for the establishment of libraries,—one at least in each township,—and the money which shall be paid by persons as an equivalent for exemption from military duty, and the clear proceeds of all fines assessed in the several counties for any breach of the penal laws, shall be exclusively applied for the support of said libraries.

5. The Legislature shall take measures for the protection, improvement, or other disposition of such lands as have been or may hereafter be reserved or granted by the United States to this State for the support of a university; and the funds accruing from the rents or sale of such lands, or from any other source for the purpose aforesaid, shall be and remain a permanent fund for the support of said university, with such branches as the public convenience may hereafter demand for the promotion of literature, the arts and sciences, and as may be authorized by the terms of such grant; and it shall be the duty of the Legislature, as soon as may be, to provide effectual means for the improvement and permanent security of the funds of said university.

The system of public instruction which was intended to be established by the framers of the Constitution, the conception of the office, its province, its powers and duties were derived from Prussia. That system consisted of three degrees; primary instruction, corresponding to our district schools; secondary instruc-

tion, communicated in schools called gymnasia; and the highest instruction communicated in the universities. The superintendence of this entire system, which was formed in 1819, was entrusted to a minister of state, called the Minister of Public Instruction, and embraced everything which belonged to the moral and intellectual advancement of the people. The system in Michigan was intended to embrace all institutions which had for their object the instruction of youth, comprising the education of the primary school, the intermediate class of schools, however denominated, and the University. Such was the system of public instruction contemplated by the first Constitution. Under the provisions of this Constitution, constant progress in educational matters was secured, and Michigan rapidly attained to a high prominence in the sisterhood of states.

For fifteen years no change was made in these provisions, and from our educational history, during that period, many valuable lessons may be derived. But with a knowledge of what had been achieved and with a determination of attaining a yet higher standard of improvement, the constitutional convention of 1850 was enabled to engraft into the new Constitution many improved provisions upon the subject of education which, with the adoption of that instrument, became part of the organic law of the State. The thirteenth article of this Constitution is devoted to the subject of education, and is as follows:

Article XIII.—Education.

Section 1. The Superintendent of Public Instruction shall have the general supervision of public instruction, and his duties shall be prescribed by law.

Sec. 2. The proceeds from the sales of all lands that have been or hereafter may be granted by the United States to the State for educational purposes, and the proceeds of all lands or other property given by individuals, or appropriated by the State for like purposes, shall be and remain a perpetual fund, the interest and income of which, together with the rents of all such lands as may remain unsold, shall be inviolably appropriated and annually applied to the specific objects of the original gift, grant or appropriation.

Sec. 3. All land, the titles to which shall fail from a defect of heirs, shall escheat to the State; and the interest on the clear proceeds from the sales thereof shall be appropriated exclusively to the support of primary schools.

Sec. 4. The Legislature shall, within five years from the adoption of this Constitution, provide for and establish a system of primary schools, whereby a school shall be kept without charge for tuition, at least three months in each year, in every school district in the State; and all instruction in said schools shall be conducted in the English language.

Sec. 5. A school shall be maintained in each school district, at least three months in each year. Any school district neglecting to maintain such school shall be deprived for the ensuing year of its proportion of the income of the primary school fund, and of all funds arising from taxes for the support of schools.

Sec. 6. There shall be elected in each judicial circuit, at the time of the election of the judge of such circuit, a regent of the University, whose term of office shall be the same as that of such judge. The regents thus elected shall constitute the Board of Regents of the University of Michigan.

Sec. 7. The Regents of the University and their successors in office shall continue to constitute the body corporate, known by the name and title of "the Regents of the University of Michigan."

Sec. 8. The Regents of the University shall, at their first annual meeting, or as soon thereafter as may be, elect a president of the University, who shall be *ex officio* a member of their board, with the privilege of speaking, but not of voting. He shall preside at the meetings of the Regents, and be the principal executive officer of the University. The Board of Regents shall have the general supervision of the University, and the direction and control of all expenditures from the University interest fund.

Sec. 9. There shall be elected at the general election in the year one thousand eight hundred and fifty-two, three members of a State Board of Education; one for two years, one for four years, and one for six years, and at each succeeding biennial election there shall be elected one member of such board, who shall hold his office for six

years. The Superintendent of Public Instruction shall be *ex officio* a member and secretary of such board. The board shall have the general supervision of the State Normal School, and their duties shall be prescribed by law.

SEC. 10. Institutions for the benefit of those inhabitants who are deaf, dumb, blind or insane, shall always be fostered and supported.

SEC. 11. The Legislature shall encourage the promotion of intellectual, scientific and agricultural improvement; and shall, as soon as practicable, provide for the establishment of an agricultural school. The Legislature may appropriate the twenty-two sections of salt spring lands now unappropriated, or the money arising from the sale of the same, where such lands have been already sold, and any land which may hereafter be granted or appropriated for such purpose, for the support and maintenance of such school, and may make the same a branch of the University, for instruction in agriculture and the natural sciences connected therewith, and place the same under the supervision of the Regents of the University.

SEC. 12. The Legislature shall also provide for the establishment of at least one library in each township; and all fines assessed and collected in the several counties and townships for any breach of the penal laws shall be exclusively applied for the support of such libraries.

Since the adoption of the Constitution of 1850, no complete revision of it has been accepted by the people, and but few sections have been altered. The only change in the article upon education is in section 6, which, by an amendment agreed to by the Legislature of 1861, and approved by the people in 1862, now reads as follows:

SEC. 6. There shall be elected in the year eighteen hundred and sixty-three, at the time of the election of a Justice of the Supreme Court, eight Regents of the University, two of whom shall hold their office for two years, two for four years, two for six years, and two for eight years. They shall enter upon the duties of their office on the first of January, next succeeding their election. At every regular election of a Justice of the Supreme Court thereafter there shall be elected two Regents, whose term of office shall be eight years. When a vacancy shall occur in the office of Regent, it shall be filled by appointment of the Governor. The Regents thus elected shall constitute the Board of Regents of the University of Michigan.

A comparison of the first and the revised Constitutions will show the points of difference and the improvements made in the latter.

The first article of the old Constitution provided for a Superintendent of Public Instruction, who was to be appointed by the Governor, by and with the advice and consent of the Legislature, in joint vote. The revised Constitution, under Article VIII, entitled "Of State Officers," provides for his election biennially, by the people, and he is to keep his office at the seat of government. The first Constitution provided that the funds accruing from the sale or rents of University and school lands should remain a perpetual fund, etc. The revised Constitution provides that the proceeds of the sales, and of all lands or other property given by individuals, or appropriated by the State for such purposes, should remain a perpetual fund, which, together with the rents, etc., shall be inviolably appropriated, and annually applied to the specific objects of the original grant or appropriation. The revised Constitution provides that all lands, the titles to which shall fail from defect of heirs, shall escheat to the State, and the interests on the clear proceeds of the sales are to be exclusively appropriated to the support of primary schools. The first Constitution had no such provision.

The first Constitution required that the Legislature should provide for a system of common schools, by which a school should be kept up and supported in each school district at least three months in each year; and any school district that neglected this was deprived of its equal proportion of the interest of the fund. The revised Constitution requires that the Legislature shall, within five years, provide for and establish a system of primary schools, to be kept without

charge of tuition, at least three months in every year, in every school district, and all instruction is to be in the English language; and any school district neglecting to maintain such school for such time is to be deprived, not only of its proportion of the school fund, but of all funds arising from taxes for the support of schools.

The revised Constitution provides for the election of Regents of the University. It provides for the election of the members of the Board of Education, to have charge of the Normal School, and it further provides that institutions for the benefit of the deaf, dumb and blind, and insane shall be fostered and supported. It provides also for the establishment of an agricultural school. The first Constitution provided for none of these.

The first Constitution provided for the establishment of libraries, one at least in each township, and appropriated for their establishment and support the money paid for exemptions from military duty, and the clear proceeds of all fines assessed for breach of the penal laws. The revised Constitution provides that all fines assessed and collected in the several townships and counties for breach of the penal laws shall be applied to the support of the libraries, there being no longer any moneys required to be paid for exemptions from military duty.

Both enjoin upon the Legislature the encouragement and promotion of intellectual, scientific, and agricultural improvement.

Under the head of "finance and taxation," the revised Constitution further provides that all specific taxes, except those received from the mining companies of the Upper Peninsula, shall be applied in paying the interest upon the primary school, university, and other educational funds, and the principal of the state debt, in the order herein recited, until the extinguishment of the state debt, other than the amount due to educational funds, when such specific taxes shall be added to and constitute a part of the primary school interest fund.

A comparison will show that the trust confided by the people to their delegates in Convention was satisfactorily executed in relation to education; and although they did not wholly agree upon the details to be embodied in the article upon this subject, they established it, finally, upon a basis of wisdom and improvement.

OLIVER G. COMSTOCK.

THE COMMON SCHOOLS.

I. EARLY HISTORY.

The French occupied portions of the territory of the present State of Michigan during a period of nearly one hundred and fifty years. So far as can be ascertained, very little was done for education within that time. In 1703, Cadillac, commandant at Detroit, urged the establishment of "a seminary for the common instruction of French and Indian children," but no record of the existence of such a school can be found. In 1755 Vaudreuil proposed to employ, without expense to the home government, "two sisters of the congregation" to teach the children of the then little village of Detroit, but it is uncertain whether this proposition was carried into effect. In 1760 the territory passed into the hands of the English, but it does not appear that any public provision for schools was made during their occupancy. By the treaty of 1783 Michigan was ceded to the United States with the other portions of the great Northwest territory. In 1785 the sixteenth section of each township was pledged by the general government for the support of schools, and this pledge was reaffirmed in the celebrated Ordinance of 1787. Concerning this grant more full information is given elsewhere in these sketches.

The Territory of Michigan was organized in 1805, and the first school law, enacted by the territorial authorities was in 1809. Unfortunately, this law has not been preserved, and but very little can be learned of the condition of educational affairs during several subsequent years. The first schools in Michigan, of which we have any trace, were maintained in the city of Detroit, and were wholly of a private character. Of these schools and their teachers but scanty and infrequent mention can be obtained either from records or tradition. From the best sources of information at command we learn that, during the period from 1802 to 1816, among the teachers who opened and conducted these schools were Rev. David Bacon, Elizabeth Williams, Angelique Campau, Mr. Peyn, Rev. John Monteith, and Mr. Danforth. Subsequent to this period teachers and schools became more numerous, and were not confined to Detroit alone. To many of the settlements the teacher soon found his way, and as a consequence schools were opened, which were maintained for a greater or less period by private subscriptions. But notwithstanding this, the facilities for obtaining even the smallest part of a common school education were very meager. The disposition to establish schools was not wanting, but want of means, and want of a sufficient number of children to constitute a school in a neighborhood, in the then sparsely settled portions of the country, were the great obstacles. Most of the early settlers, however, realizing the fact that schools

were necessary to the advancement of civilization, refinement and improvement, were not slow in doing all within their power to secure them in their communities.

The school-house of the pioneers was generally located at the intersection of roads, where there were any, or on the brow of some hill. It was formed of logs, sometimes roughly hewed, and was generally about eighteen feet wide by twenty-four feet long. The eaves were about ten feet from the ground, and the roof was covered with rows of clapboards, held in place by long poles running lengthwise. The openings between the logs were chinked with pieces of wood, stones or any other convenient material, and plastered with mortar made from the ground near by. The door was made of rough boards, hung on hinges of wood, and fastened with a latch of the same material. The floor was made of rough boards, where they could be obtained, but frequently logs split in two and hewn smooth were made to answer the purpose. The windows were sometimes made by cutting out one of the logs and pasting oiled paper over the opening, thus admitting some light and excluding some cold; but where glass could be obtained, openings were made by cutting through three or four logs and inserting sash. No stoves were used in those days, but instead an ample fire-place was constructed by sawing out a few logs at one end of the house and filling up the hole thus made with stone and mud, which formed the back of the fire-place. Sometimes the extravagance of a brick hearth was indulged in, but usually the hearth consisted of dried clay and sand. The chimney was built of sticks, plastered on the inside with mud. Wood being plenty, there was usually a rousing fire roaring in these primitive fire-places. The school furniture was in keeping with the exterior and interior appearance of the building. For seats, slabs mounted on legs were universally used, while desks were constructed by placing boards upon pins driven into the walls of the house. The inside walls were sometimes covered with boards, but more usually received the common coat of mortar. These walls were bare of pictures and other ornaments, if we except such rude efforts at portraiture as were made by the more ambitious and skillful pupils with no better material than chalk or a piece of coal taken from the fire-place. Those adjuncts which are now regarded as indispensable features of every school-house, as well as of the adjacent grounds, were seldom, if ever seen; but the time and ingenuity of the builders of these primitive temples of learning seem to have been exhausted when the main building was completed and furnished in the ordinary way.

The wages obtained by teachers in the early days was an uncertain quantity. The teacher would usually draw up an article of agreement binding himself to teach the school for some specified number of weeks, six days per week, and from six to eight hours per day, for which the patrons agreed to pay him a stipulated sum for each pupil sent. Sometimes the teacher received a part of his pay in farm produce, or labor, when the patron was unable to pay in money.

The branches usually taught in the schools in those early days were reading, spelling, writing, and arithmetic. Sometimes geography and grammar received attention, but not often. The books mostly used were Murray's English Readers, with Introduction, Dilworth's and Webster's spelling books, Daboll's and Ostrander's arithmetics, Morse's geography, and Greenleaf's and Murray's grammars. The instruction in most schools was very rudimentary in character, while it cannot be said that there was much, if any, method in the manner in which it was given. Spelling and reading were made specialties, and were regarded as the chief tests of scholarship. The alphabet was taught in the

slow old way, by commencing at the letter A and naming the letters in order to the letter Z. Usually one term was consumed in learning the letters, and a second one in learning words of one syllable and simple words of two syllables. If a pupil was sufficiently apt to be able to learn the exercises in reading in the spelling-book during the third term, he was immediately advanced to the English reader class. There were no mental arithmetics in use in those days, and the first exercises of the student in the study of numbers were in connection with the slate. The average pupil generally progressed before quitting school as far as through the fundamental rules, and possibly to "vulgar fractions;" others, endowed with more perseverance and favored with better opportunities, were not content until the mysteries of the "rule of three" had been explored, while occasionally one might have been found who had been "through the book." Neither gold nor steel pens were used, but the writing was done with pens made of quills. One of the chief requisites in a teacher's qualifications consisted in his ability to make and mend pens.

Such was the condition of education throughout the rural districts of Michigan prior to its admission as a state. Many schools of a higher character than those whose description has been attempted, had, in the meantime, been established in the larger towns; but nearly all schools were supported by the voluntary contributions of the people.

Notwithstanding the limited facilities provided by which instruction might be given the children of the early days, there were to be found among the pioneers men who had received liberal culture in the schools and colleges of the eastern states; while it may be truly stated that narrow and restricted views in regard to education found lodgment in the minds of comparatively few of the people. It was not their intention to confine school instruction to those subjects, a knowledge of which would enable the child to provide for the wants of his physical nature alone, but whenever circumstances permitted they sought to enlarge its sphere and make it an important agency in arousing and strengthening the child's moral and mental attributes as well. The social status of the teacher was on an equal footing with that of the minister and the physician. Society welcomed him to its presence as an honored member. His periodic visits to the homes of his pupils were regarded as great events by each household, and many were the preparations that preceded his appearance to "board out" the share of any patron of his school. The qualifications of the teachers were various in their character, but generally such as to command respect, and the influence they exerted in the communities in which they were employed contributed not a little to the formation of that public sentiment which afterward obtained a practical recognition of school interests in the building of the State.

A Contemporary View.

It was about the time of the organization of the school system of Michigan that there was started a very general agitation of school interests and improvements throughout the country. The teachers' institute and the educational association had hardly yet been organized, except perhaps in one or two states in a very experimental way; but active public-spirited men were devoting a large share of their time and energies to systematic lecturing tours through various sections of the North. Horace Mann, Dr. Mayo, Henry Barnard, and others were active in this good work, and their labors bore abundant fruit in the general intelligence which the people gained regarding their school interests.

Among the men who traveled widely throughout New England and New York was Prof. J. Orville Taylor, editor of an educational monthly, "The Common School Assistant," published at Albany, N. Y., and the agent and manager of an enterprising school-book publishing concern, styled "The American Common School Union." Mr. Taylor visited Detroit in June, 1839, and from there started on a lecturing tour throughout the southern part of the State, visiting fourteen of the leading places in the southern tiers of counties. He was probably the pioneer in the State of that corps of school-book agents who have from that day to this been among the most active and progressive friends and advocates of good schools, good education, good methods, and good books.

In the number of his magazine for September, 1839, we find the following very interesting description of his visit to Ypsilanti, June 10, 1839:

Our Education Tour in Michigan.

This young State has burst into existence with all the suddenness and beauty of an opening flower in the tropical climate; and although she is not yet the "Empire State," she is destined to be the "Educating State." Michigan has a larger school fund in prospective, and a better school law in operation than either of her sister states. Perceiving these important features in a new State, I had long felt a desire to visit the people and the schools of Michigan. On the 9th of June I had the privilege of addressing a large audience in the State House at Detroit, and at the close of this meeting, through the earnest solicitations of the Hon. C. C. Trowbridge and others, agreed to lecture in the following prominent places of the State: Ypsilanti, Ann Arbor, Jackson, Marshall, Kalamazoo, St. Joseph, Niles, Edwardsburgh, White Pigeon, Centerville, Coldwater, Jonesville, Tecumseh, Monroe and Detroit.

The first place to visit was Ypsilanti. This flourishing village is fifteen years old and already numbers 2,000 inhabitants. It contains four excellent schools,—two district and two private schools.

Mr. D. Hammond, the teacher of one of the district schools, is an experienced, well-informed, competent instructor of youth. His school numbers 65. The external appearance of the school-house is pleasant; but the rooms are not ventilated, and the desks and seats are badly constructed. The lower part of the windows was too near the floor, permitting the children to look into the street; the ceiling was so low that it gave the room a close, cramped appearance.

A school-room should have a ceiling at least fifteen feet high; the bad air could then rise above the children's heads, and a good sized window would not extend so far down as to permit the children to look through it. The upper sash of the window should drop instead of raising the lower one. After mentioning this construction of school-houses, and the above atmospheric principles to Mr. H., he remarked, "I have frequently requested my employers to make the alterations you propose, but they think it downright folly, and I cannot get them to do anything."

This did not surprise me, for on a certain occasion I took no little pains to point out to a parent these improvements in a school-room, when the poor man very suspiciously looked me in the face and said: "I guess that's some speculation of yours to make something out of us; we don't believe in this changing,—it's all got up to make money."

I remarked to him that I was not a carpenter, and that he only could make anything by the proposed alterations. "But," said he, "we don't want ventilators, as you call them, for they'll let the cold air down upon the school."

I was obliged to let the house rest as the good people had made it; and I think Mr. Hammond will be compelled to labor long before he convinces his patrons "that those who will not receive new virtues must abide old evils."

Mr. Hammond receives from each pupil two dollars per quarter, and all things considered has a school which does himself and the village great credit. We were glad to learn that Mr. H. makes the business his study and profession for life.

Mr. Melvin, the teacher of the other district school, is a young man of good attainments, and one who thinks for himself. Will make an excellent teacher if *properly encouraged and rewarded.* Has 60 scholars. The school-house is of brick material and delightfully located in a shady grove.

I was glad to see back pieces to the seats which his small pupils occupied. The ceiling of his room, however, was too low, and the air impure from a want of ventilators.

The seats and desks in both of the district schools could be improved essentially.

The long seats, permitting children to sit side by side, and to look each other in the face, should give place to single seats, all facing the teacher.

Miss Clark's private school numbers 35 young ladies, who are not pleasantly accommodated in a small room in a private dwelling. The citizens of Ypsilanti should provide Miss C's school with a more suitable room. I found in the school a globe, an orrery, a good set of diagrams; also a small philosophical apparatus.

Miss Thomas teaches the other private school. In this I found 30 young misses and four or five small boys. Music, painting, drawing, French, etc., were taught here as in Miss Clark's school. We believe Miss T., however, is the only one who teaches vocal music in school.

Vocal music should be taught in all our schools, for we can sing some things into people that we cannot talk into them. The Germans have these proverbs: "Music is the gymnastics of the affections," and "When there is music the devil is absent." An old German teacher was once heard to say that "when his pupils were singing the devil sat *outside* of the school door and growled."

As Ypsilanti has a population of 2,000, there should be 400 children in school, as one-fifth of the people are between four and sixteen years of age. But it is seen that only 195 children were attending school. And as all the schools were full of children, it is evident that at least another school and greater exertions in behalf of education are required. The healthy, beautiful location, and the urgent demands for a high school or academy, make Ypsilanti a desirable place for some enterprising scholar, who is determined to make teaching a well rewarded and honorable profession.

II. TERRITORIAL LEGISLATION.

The history of early legislation may now, perhaps, be considered a matter of no practical importance. But to know the difficulties which embarrassed it, is to increase our appreciation of the value of the blessings we have derived from it, and to make us estimate more highly our educational privileges. Much of this history has been developed in the former reports of the Superintendent of Public Instruction. Reference to it will show what an object of constant interest education has been to the inhabitants of Michigan from its earliest settlement to the present day. In the journals of the Territorial Legislature, in the articles of admission into the Union, in the first Constitution of the State, in the messages of its successive chief magistrates, in the acts of the Legislature, and in the efforts of the people, will be found ample proof that under all changes and circumstances the subject of public instruction has been of first importance.

The first steps to secure the benefit of the land grant of more than a quarter of a century before were taken in 1824, when for the first time the people had elected their own local Legislature. At that period the attention of the Territorial Legislature and of Congress was called to the preservation of the grant and its ultimate application to the uses so nobly designed by the Fathers of the Republic. The circumstances of the country had been peculiar. The population was small, and ancient private land claims existed, unsettled and ill-defined. No surveys were made until after the war of 1812, and it had, till then, been impossible to give effect to the grant; but as the prospects of the territory began to be changed and the fertility of the soil became known, the influx of emigrants from other states commenced, and it was the earliest work of the first Legislature of the territory to secure for themselves, for us, and for posterity, the benefits it was designed to afford.

The first law passed to provide for a system of common or primary schools was in 1827, four years after the organization of the Legislative Council. This act provided that every township containing fifty inhabitants or householders should employ a schoolmaster, of good morals, to teach children to read and write, and to instruct them in the English and French languages, as

well as in arithmetic, orthography and decent behavior, for such terms of time as should be equivalent to six months for one school in each year; every township containing one hundred families or householders, for an increased length of time; and to provide in addition a schoolmaster or teacher to instruct children in the English language. Every township containing 200 families or householders was to be provided with a grammar schoolmaster of good morals, well instructed in the Latin, French, and English languages. For neglect of any township to procure and support such teacher as was required for the various lengths of time, the township incurred a penalty in proportion, from fifty to one hundred and fifty dollars; and the penalty was to be levied by warrant from the court upon the inhabitants of the deficient township, and was appropriated for the use of such schools as had complied with the law, and whose circumstances most required such assistance. The inhabitants were to choose five persons within their township, as inspectors of common schools, who possessed similar powers to these officers at the present time. The inhabitants voted at the annual meetings to raise such sums of money upon the polls and ratable estates, within the respective townships, for the support and maintenance of a schoolmaster, to teach youth to read, write, and cipher, as a majority deemed expedient; to be assessed and collected at the same time and in the same manner with the township and county taxes; the moneys were apportioned by the supervisor and township clerk, according to the number of children between the ages of five and seventeen, as appeared by a census of the district, taken under oath by one or more of the trustees of the school, who were appointed in each of the districts. The moneys were to be applied exclusively in paying the wages of the teacher or schoolmaster. But the law did not apply to any township which at an annual meeting declared by a "two-thirds vote that they would not comply with the act."

In 1828 Congress authorized the Governor and Council to take charge of the school sections, to protect them from waste and injury, and to provide by law for leasing them. In 1833 the school law of 1828 was repealed and another act passed, which provided for the election of three commissioners of schools and ten inspectors, whose duties were similar to those of inspectors under the present law. They were charged with the protection of section sixteen, with power to lease and manage it, in whatever manner they deemed best calculated to enhance its value. Any moneys arising from such care and management were to be applied to the support of common schools. The mode of taxation to build a school-house, after a majority of the inhabitants approved of the estimate of expense, was similar to later provisions, requiring the director of each district to obtain a transcript of so much of the last assessment roll of the township as related to his district, and to add to it all the property of persons who had become residents, and of residents who had purchased since the last assessment roll was made.

A humane provision of the law gave discretion to directors, whenever there was within any district any poor and indigent person, unable to pay for the instruction of his or her children, or where there were poor children without parents, to order such children to be instructed at the school, and the expense of such instruction was defrayed by tax upon the property of the district.

This law gave authority to the several commissioners of adjoining townships to constitute and establish conjointly school districts on the line dividing such townships. It also authorized the appointment of some person, by the Governor of the Territory, as "Superintendent of Common Schools;" but there

is no record, that we have been able to find, that this office was ever filled. It was made the duty of this Superintendent to take supervision of section sixteen, and of all fractional sections for the use of schools, where trustees or commissioners had not been chosen. The directors of districts were to report to the Superintendent the whole number of pupils taught in the district for three months, and any additional time, together with the amount of moneys received from the commissioners. It was made the duty of the Superintendent to report annually to the Legislative Council the number of children taught, the condition of the school lands, suits or actions brought, and moneys arising from this and other sources, and whatever else might to him appear necessary concerning the lands and the condition of the schools.

In 1835, the same year in which the law was passed to form a Constitution and state government, an amendment to the act of 1833 made it the duty of the school commissioners to make yearly dividends of all moneys coming into their hands by virtue of their office, for rents or damages done to section sixteen, and to distribute and pay over the amount to the directors, in proportion to the number of pupils taught, according to the provisions of the law of 1833. This amendment repealed the sections of the previous act relating to the Superintendent, and provided for his appointment by the Governor, by and with the advice and consent of the Legislature, with the same powers and duties as before.

III. ORGANIZATION OF THE SCHOOL SYSTEM.

The first Legislature of the State of Michigan convened at Detroit, November 2, 1835, pursuant to the provisions of the Constitution, and adjourned March 28, 1836. The subject of education did not receive attention at this meeting, but at an extra session which opened July 11, 1836, the effective organization of the future school system came up for consideration. In his first message to the Legislature, Governor Stevens T. Mason called attention to the importance of making liberal provision for schools in the following language: "Ours is said to be a government founded on intelligence and morality, and no political axiom can be more beautifully true. Here the rights of all are equal, and the people themselves are the primary source of all power. Our institutions have leveled the artificial distinctions existing in the societies of other countries, and have left open to every one the avenues to distinction and honor. Public opinion directs the course which our government pursues, and so long as the people are enlightened, that direction will never be misgiven. It becomes, then, your imperious duty to secure to the State a general diffusion of knowledge. This can in no wise be so certainly effected as by the perfect organization of a uniform and liberal system of common schools. Your attention is therefore called to the effectuation of a perfect school system, open to all classes as the surest basis of public happiness and prosperity."

On the 16th of July, 1836, Mr. Whipple, from the committee on education, to whom had been referred a resolution of the House of Representatives, instructing them to report whether any law be necessary to give effect to the Constitution, regarding the subject of education, reported that full and complete effect could not be given at this session to an article respecting it; that in legislating upon a subject of such vital importance, the proceedings of the Legislature should be guarded; that no measures should be taken without the greatest consideration; that the Congress of the United States, appreciating

the vast importance of a universal diffusion of knowledge, so necessary to the very existence of a republican government, had granted to the State, lands, not only for supporting an extended system of common schools, but for the purpose of founding a University; that the framers of the Constitution, impressed with the magnitude of the subject, with wise forecast, had adopted an article intended to protect the fund from being diverted, and made other general provisions, well adapted to attain the great end sought to be accomplished; that the committee did not think it expedient then to recommend the adoption of any system of instruction, but had provided a bill for collecting such information as would enable their successors to act understandingly, and hoped that by an efficient and well digested system to be devised thereafter, the intellectual and moral condition of the people would be improved, their happiness promoted, and their liberties established on a firm foundation. The bill thus introduced resulted in the act approved July 26, 1836, and under its provisions on the same day Rev. John D. Pierce was nominated by the Governor for the office of Superintendent of Public Instruction, and unanimously confirmed by both branches of the Legislature. To this officer was confided, by the act referred to, the responsible duty, among other things, of preparing a system for common schools, and a plan for a University and its branches.

At the session of the Legislature in 1837, in accordance with the act of the preceding year, Mr. Pierce submitted a plan for a system of public instruction. This plan defined the rights, powers and duties of school districts; the duties of district officers; of township officers, of school inspectors, and of townships; proposed the establishment of libraries, and plans for school-houses; the establishment of academies as branches of the University, and a method of organization for the University, and also defined the duties of Superintendent of Public Instruction. The officers of the system proposed for school districts were moderator, vice moderator, director and assessor, and three township school inspectors, with the township clerk as clerk of the board.

The following extract from the report of the Superintendent evinces the high estimation in which that officer viewed the system of free schools as connected with education in a government like ours. He says:

"It has been said, and rightly too, that common schools are truly republican. The great object is to furnish good instruction in all the elementary and common branches of knowledge, for all classes of community, as good indeed for the poorest boy of the State as the rich man can furnish for his children, with all his wealth. The object is universal education—the education of every individual of all classes. The great thing which has rendered the Prussian system so popular and efficient, which has so strongly attached it to the hearts of the people, and made it an essential element of the social state, is its truly republican character. It is this feature of free schools which has nurtured and preserved pure republicanism in our own land. In the public schools all classes are blended together; the rich mingle with the poor, and both are educated in company. In their sportive gambols a common sympathy is awakened; all the kindlier sensibilities of the heart are excited, and mutual attachments are formed which cannot fail to exert a soothing and happy influence through life. In these schools the poor are as likely to excel as the rich, for there is no monopoly of talent, of industry, or of acquirements. It was the ceaseless application and untiring perseverance of Franklin, and not his wealth, which raised him to the highest eminence. It is this system which brings forward and elevates to places of distinction a due proportion of that class of citizens which the

Romans called new men—men who owe nothing either to birth or fortune—but all to the free schools and their own exertions. It is this principle of universal education adopted by the Pilgrims, and cherished by their descendants through succeeding generations, which has given them and their sons pre-eminence. Nothing can be imagined more admirably adapted, in all its bearings, to prostrate all distinctions arising from mere circumstances of birth and fortune. By means of the public schools the poor boy of to-day, without the protection of father or mother, may be the man of learning and influence of to-morrow; he may accumulate and die the possessor of thousands; he may reach the highest station in the Republic, and the treasures of his mind may be the richest legacy of the present to coming generations. Whilst the reverse of all this may be true of the young scion of wealth and power, proud and accomplished as he may be in person, and gifted also by nature with the highest order of intellect, and blessed with the fairest prospect of usefulness; the long cherished hopes of doating parents, and the brightest youthful visions of rising greatness, may all be disappointed in some thoughtless moment of ungoverned passion, and his sun go down in the gloom of midnight darkness. Let free schools be established and maintained in perpetuity and there can be no such thing as a permanent aristocracy in our land; for the monopoly of wealth is powerless when mind is allowed freely to come in contact with mind. It is by erecting a barrier between the rich and the poor, which can be done only by allowing a monopoly to the rich—a monopoly of learning, as well as of wealth—that such an aristocracy can be established. But the operation of a free school system has a powerful tendency to prevent the erection of this barrier."

Another feature which was presented to the consideration of the Legislature was the obligation on the part of the State to suffer none to grow up in ignorance. For this purpose, the Superintendent suggested that all persons having the care of children should be required to send them to school the constitutional portion of each year. The objects to be attained were the welfare of the individual instructed, and the security of the State; and the reason given was, that the State had the right to require the education of all children and youth, and to impose upon all to whom their management and care are committed the duty of educating them. In carrying out this idea, the Superintendent was of opinion that it might not be consistent with the principles of our Constitution to prohibit private seminaries, but that it was consistent, with both the spirit and the letter of our institutions, to place the public schools upon high and elevated ground, to make them adequate to the wants of the whole community; to place them on such a footing as to furnish the best instruction, not only in the more common, but in all the higher branches of elementary knowledge. "But," says the Superintendent, "the most perfect organization of the entire system in all the varied departments of instruction must fail of securing the desired results without a sufficient number of competent teachers." To this end, it was suggested, as a subject for consideration, whether it would not be expedient to fix, by law, a minimum price, below which no teacher should be entitled to receive aid from the public fund, and to provide prospectively that every teacher of the public schools shall have been through a regular course of training, and have received his diploma from the academic board, setting forth his qualifications as a teacher. It was suggested, in relation to the public money, whether any township ought to be entitled to its proportion of the income of the fund, which did not comply with the provisions of the law, and maintain an efficient school board. It was recommended that the active agents of the schools, upon whose activity and energy the success of the system would

depend, be few as possible, their duties clearly defined, and their services paid for; that the time of any man was his property, and ought not to be taken by the public without remuneration.

It was recommended that the Legislature provide, as soon as circumstances would permit, for district libraries. The clear proceeds of all fines, the equivalent for exemptions from military duty, and a district tax of $10 were suggested as establishing the basis of a fund for the purpose.

Mr. Pierce also made recommendations for a law defining the duties of the Superintendent of Public Instruction, and presented a plan for the management of the University and the establishment of academies or branches of the University. These recommendations will be found more fully treated elsewhere in these sketches.

The report of Mr. Pierce was presented to the Legislature on the 5th of January, 1837, and, February 18, the committee on education in the House of Representatives submitted a report concurring in the views presented by the Superintendent, and also a bill, which was passed, authorizing the Superintendent to sell the lands set apart for educational purposes, both school and University and to invest the proceeds in the manner pointed out by law, and to give him the care and disposition of all the lands and other property reserved and granted to the State for educational purposes. A law was also passed defining other powers and duties of the Superintendent, to which attention is given elsewhere in these sketches, and on the 20th day of March of this year was approved the "act to provide for the organization and support of schools." This law also carried out in its details the views of the Superintendent, but did not give to Michigan a system of free schools. It provided for the establishment of school districts, with the offices of moderator, director and assessor, and defined their duties; for the appropriation of a share of the proceeds arising from "fines, breaches of penal laws and exemption from military duty," to every district in which the inhabitants voted a tax for a suitable library case, and a sum not to exceed ten dollars annually, for the purchase of books; it established a board of school inspectors, defined the duties of township clerks relative to schools, and provided for the distribution of the income of the school fund among the school districts in proportion to the number of children in each between the ages of five and seventeen years, and required a report from the inspectors to the county clerk annually of the whole number of districts in the township, the number from which reports were received for the year, the length of time a school had been taught for the year by a qualified teacher, the amount of public money belonging to each district, the number of children taught in each, and the number belonging to each between the ages of five and seventeen, the amount of public moneys, the amount raised in the townships for schools, and the manner of its appropriation. The method of supporting the schools was by the levy of a tax upon the taxable property of the district, in proportion to its valuation, which was to be obtained by a transcript of the township assessment roll. The districts had authority to levy and assess upon the taxable property of the district all moneys voted by the district, the necessary sums for appendages and fuel, and for purchasing and leasing a site, and building, hiring or purchasing a school-house—a fund to be raised for this purpose specially. It was made the duty of the board of supervisors to add to the sums to be raised in each township a sum equal to that apportioned to the townships from the income of the school fund.

Such in brief were the provisions of the original school code of the State.

With but forty-six sections at that time, it has since gradually expanded until it now numbers over two hundred sections, and nearly all of the original have been more or less amended or changed, yet the first general plan is still the foundation upon which the present system is built.

IV. DEVELOPMENT AND GROWTH OF THE SYSTEM.

To trace the development and growth of the common school system in all its details, and to note the many additions to and changes in the provisions of the school code of the State, would prove a more extensive labor than is contemplated in the compilation of these sketches; consequently, only a few of the more important features of advancement in the system are noted in this connection. It has also been found necessary to omit any notice of projects of legislation, as well as many enactments of secondary importance, and nearly all mention of local or special laws.

School Lands.

The idea originally entertained by Congress in making the grant of the sixteenth sections, was to give to each township the exclusive benefit of its own section. Some of the States had acted upon this idea, and the result was that some townships secured a much larger fund from the sale of the lands than others, while in many cases much of the avails was lost or squandered. In the case of Michigan, however, chiefly through the influence of General Isaac E. Crary, this grant was made to the State, and the avails of the grant became, in consequence, a common fund which has ever been carefully protected by the State.

The lands having been secured to the State, the first all important question to decide was as to what disposition should be made of the lands by which the greatest amount might be realized. Some proposed that the lands should be leased, not sold. But most were soon satisfied that such a plan would be a failure, and it was decided that the lands should be sold. The Superintendent of Public Instruction was authorized to sell to the amount of one and one-half million dollars at the minimum price of eight dollars per acre. The terms were, one-fourth at the time of sale, and the remainder in annual installments, commencing within five years after the purchase, at seven per cent. interest; and giving twenty-five years to complete the payment. The sales were to be at auction, and those lands not sold could afterward be taken at the minimum price.

The first sales were held July 5, 1837; and in a few months they amounted to over four hundred thousand dollars, at an average of twelve dollars per acre. It was a time of contracted currency, but of inflated credit and expectations; and of over six hundred thousand dollars sales in the first four years, about one-third of the lands were forfeited for non-payment of interest, although an extension of time was twice granted by the Legislature. Many found the three-fourths of the price still due was more than the full value of the land, and allowed it to revert to the State, while others submitted to the forfeiture on account of their inability to meet the interest.

In 1841 the law was amended, whereby the minimum price was reduced to five dollars per acre, and purchasers were permitted to pay the three-fourths at their pleasure; making it a permanent loan so long as the annual interest should be paid. This was also made applicable to all previous sales. But this

failed to meet the necessity of the case or to stop the forfeitures. The trustee had driven a hard bargain with the parents of its wards, and further relief was deemed necessary and just.

In 1842 this relief was granted by an act that all school lands that had been sold for eight dollars or more per acre, should be appraised by the Associate Judge and Surveyor of the respective counties (but not to be less than five dollars per acre), and the difference between the original price and the appraised value was to be credited upon the principal. Under this appraisal the reduction was from an average of about eleven dollars per acre to about seven dollars; and this, with the forfeitures, reduced the fund nearly one-half. The sales up to December 10, 1842, had amounted to $711,404.85; which, under the above provisions, was reduced to $359,809.41.

Until the year 1843, the custody and accounts of the University and school lands were with the Superintendent of Public Instruction; but in that year the State Land Office was established, and he was thereby relieved of that onerous duty. Their custody, while the State was under territorial government, was given to the Governor and Council, and by them assigned to a Board of Commissioners. By the time their custody became permanently fixed with the Land Office, the situation of the fund had become greatly confused. The books had been imperfectly kept, the records were deficient, and the principal thing shown was the "totals." But there is no reason to suspect any fraudulent practices. The confusion is fully accounted for in the multiplicity of duties of the Superintendent, the frequent changes in the law, and the forfeitures and reductions by appraisal.

These lands were originally estimated at 1,148,160 acres; the Auditor General, however, in his report for 1874, gives the amount as 1,067,396 acres, while the Commissioner of the State Land Office furnishes a statement, made from the records in his office in 1880, that the whole amount of school lands received by the State aggregates 1,077,208.76 acres. This last amount includes not only the original, but all lands more recently granted to supply deficiencies in fractional sections, and for portions of sections which had been sold by the Federal Government. Of these lands there were remaining unsold, September 30, 1880, 426,860.39 acres, which would show that over 650,000 acres have been disposed of. The average price per acre for which these lands have been sold is about four dollars and fifty cents.

Permanent Fund.

From the sale of these lands the greater part of the permanent fund for the support of schools in the State is derived. In the management of the school moneys, at an early day the policy of loaning the same to counties and individuals was adopted. The policy of loaning to individuals was, however, soon abandoned, and yet, of such loans, the amount of about $12,0 0 was lost to the State. Mortgages were taken in each case, but, for some reason, no successful effort was ever made to foreclose them. One of these mortgages was foreclosed and bid in for the State, but the State never took possession, while another was canceled by a resolution of the Legislature in 1877. The remainder stand to this day uncanceled on the records. In 1847 the Legislature directed the Board of Auditors on land claims to collect or compromise these debts, but there is no evidence that the subject was ever considered by the Board.

But the time soon came when the State needed money to pay its own debts, and the policy was adopted of making a perpetual loan to the State of the educational funds; consequently, the avails from the sale of the school lands have, for many years, gone into the State Treasury, the faith of the State being pledged for the annual interest, at the rate of seven per cent. This is unquestionably the wisest policy that could have been adopted. The fund is now safe beyond all possible contingency, while the State not only pays interest upon the money that is covered into the Treasury, but assumes and guarantees the payment of interest due from purchasers of part-paid lands. Besides the amount derived from the avails of the school lands, a slight addition is made to this fund each year by the proceeds arising from the sale of such lands as have escheated to the State through a failure of heirs. This fund is known as the primary school fund.

In addition to the above funds, section five of the act of 1858, providing for the sale of swamp lands, requires that one-half of the cash avails of such lands shall be denominated a school fund, and be disposed of in the same manner as the fund derived from the sale of the school lands, except that the State shall pay but five per cent. interest instead of seven. To distinguish this fund from the former, it is designated and known as the primary school five per cent. fund.

It will be observed that while nominally the ownership of the school funds is in the State, the State is but the trustee, and the funds belong to all those who, for the time being, are the proper subjects of the benefits arising therefrom. The condition of these funds September 30, 1880, was as follows:

Primary School Fund.

In the hands of the State	$2,554,590 96
Due from purchasers of lands	424,639 15
Total seven per cent. fund	$2,979,230 11
Income	210,773 15

Primary School Five Per Cent. Fund.

In the hands of the State	$326,350 95
Due from purchasers of lands	35,368 38
Total five per cent. fund	$361,719 33
Income	16.181 45
Income from both funds	$226,954 60

The only means as yet provided for an increase of the permanent school fund is the sale of the remainder of the primary school lands, and one-half of the cash avails of swamp lands. What the ultimate accumulation may amount to is a matter of conjecture, and an estimate made now would most probably prove quite different from the facts that time and circumstances shall develop. But to the interest fund, which is yearly apportioned to the districts, a very large increase is possible, and almost certain, at no distant day. Section 1 of Article XIV of the Constitution provides that the specific taxes received from

various corporations shall be added to and become a part of the primary school interest fund, as soon as the state debt shall have been extinguished. Under this provision, these taxes will be added annually to the amount apportioned to the schools.

The following table will show the amount of the primary school interest moneys apportioned and paid by the State, and the rate of apportionment per child * for each year from 1839 to 1880, inclusive. There were some payments during the two or three years preceding 1839, but of the amounts we have not been able to find any reliable statements.

YEAR.	Rate per Child.	Amount Paid to Counties.	YEAR.	Rate per Child.	Amount Paid to Counties.
1839	----------	$20,248 96	1860	$0 46	$108,823 62
1840	----------	19,217 68	1861	42	103,457 31
1841	----------	10,789 36	1862	50	126,464 16
1842	$0 32	15,489 92	1863	50	130,978 50
1843	37	19,292 17	1864	50	136,362 00
1844	42	28,076 06	1865	48	134,634 48
1845	28	22,237 34	1866	46	136,550 00
1846	31	27,925 72	1867	45	143,787 59
1847	32	31,274 74	1868	45	151,630 50
1848	30	32,605 20	1869	47	165,651 37
1849	33	39,057 67	1870	48	179,483 16
1850	34	42,794 44	1871	49	186,485 24
1851	34	46,824 80	1872	48	186,915 84
1852	40	57,559 60	1873	49	196,613 60
1853	36	54,033 18	1874	50	208,935 06
1854	45	72,537 75	1875	50	217,499 06
1855	48	83,242 08	1876	50	223,969 00
1856	53	99,925 52	1877	46	211,055 56
1857	53	107,170 37	1878	50	234,499 57
1858	50	107,569 89	1879	48	227,565 20
1859	46½	105,706 07	1880	47	226,954 60
Total payments					$4,681,893 78

TOWNSHIP SCHOOL OFFICERS.

In the original plan, each township had three school inspectors, whose duty it was to organize districts, apportion the school moneys to the districts, examine teachers and grant certificates and visit schools. They were also required to make annual reports to the county clerk of the schools in their township. With the exception of some changes in the mode of visitation, which are more fully treated elsewhere in these sketches, the provisions of the original enactment remained unchanged till 1867, when the county superintendency was established. Since that time, and especially upon the repeal of the county superintendency law, the organization and duties of the township board of school inspectors have been variously modified. At the present time the board consists of the township superintendent of schools, the township clerk and one elected school inspector. The township superintendent is the chairman and treasurer of the board, and the township clerk is made its clerk by virtue of his office. The duty of the board is to organize school districts, and change

* We have been unable to ascertain the rate of apportionment per child previous to 1842.

their boundaries when necessary; to locate sites for school-houses on the failure of districts to agree; and it may appoint district officers when districts fail to elect. It also compiles the annual reports of the directors of the several districts in the township and forwards the same in connection with its own annual report, to the county clerk, to be by him transmitted to the Superintendent of Public Instruction. It also has the care and management of the township library. In the several incorporated cities of the State the schools are removed from the control of the township inspectors and placed under the entire control of the boards of education of such cities, such boards being empowered to perform, in and for their respective cities, duties similar to those of the township boards of school inspectors.

The following table shows the number of boards of school inspectors of townships and cities reporting to the Superintendent of Public Instruction, each year, from 1836 to 1880, inclusive:

Year.	Number Reporting.	Year.	Number Reporting.	Year.	Number Reporting.	Year.	Number Reporting.	Year.	Number Reporting.
1836	39	1845	417	1854	508	1863	695	1872	902
1837	109	1846	420	1855	517	1864	708	1873	941
1838	245	1847	425	1856	540	1865	713	1874	955
1839	302	1848	442	1857	577	1866	735	1875	987
1840	324	1849	448	1858	605	1867	774	1876	1,004
1841	331	1850	460	1859	628	1868	780	1877	1,030
1842	355	1851	477	1860	647	1869	828	1878	1,064
1843	359	1852	491	1861	658	1870	858	1879	1,064
1844	380	1853	503	1862	680	1871	883	1880	1,075

School Districts and Officers.

The school district is the simplest element of the common school system of Michigan. Its formation was the first thing mentioned in the original state legislation providing for the common schools. Under this enactment it was made the duty of the board of school inspectors to divide the township into such number of school districts as might be deemed necessary, all districts being limited to nine sections of land. It was also provided that whenever it might be necessary or convenient to form a district from territory in two or more adjoining townships, the inspectors of such townships should meet in joint session and take the necessary action in the formation of such district. Whenever the inspectors had formed any district, it was made the duty of the township clerk to deliver a notice of such formation and of the time and place of the first meeting to a taxable inhabitant of the district, and he was required to notify all voters residing in the district of the same. The voters thus notified were to meet in accordance with the notice and proceed to organize the district by the election of officers and the transaction of other necessary business. These provisions have never been materially changed, and, consequently, districts are now formed and organized very much in the manner described. The earlier laws gave the right to vote at a district meeting to every white male inhabitant of the district who was at least twenty-one years of age, and who was also liable to pay a school tax in the district. This provision was afterwards amended so that all tax-payers of whatever color or sex became voters. This law has been since amended from time to time, so that the present enactment provides that every person of the age of twenty-one years or more, regardless of race or sex, who has property liable to assessment for school taxes in any district, and who has

resided in the district at least three months preceding any district meeting, is a qualified voter on all questions arising in the district, and all such persons, unless they are aliens, are eligible to hold district offices. It is also provided that all other persons of like age and residence, who are not tax-payers in the district, but who are entitled by the general laws of the State to vote at township elections, may vote at a district meeting on such questions as do not involve the raising of money by tax.

From the beginning of the state system, the officers in all primary school districts have been a moderator, a director and an assessor, and these officers together have constituted the district board. Previous to 1859 the officers were elected annually for a term of one year each, but since that date the term of office has been three years, one officer being elected annually; thus providing for a continuous organization and doing away with abrupt changes in policy and in the administration of district affairs.

Owing to the rapid increase in population in many districts, especially in villages and cities, it became necessary under the original law, which contemplated the employment of but one teacher in each district, to divide the district in order to employ a sufficient number of teachers. The people, however, did not favor such divisions, and the Legislature consequently authorized the inspectors to form union school districts, each having an enlarged board. Out of this ultimately grew the graded and high school law which was enacted in 1859. By this act, which has been but slightly amended since, a district having more than one hundred children between the ages of five and twenty years is now empowered to organize as a graded school district and to elect a board consisting of six trustees, two of whom are elected annually for a term of three years each. This board chooses from its own number a moderator, a director, and an assessor. At the time this law was first enacted, districts organizing under its provisions secured much greater powers than they could exercise under the more simple organization. Since that time, however, the powers of primary school districts have been gradually enlarged from time to time, until they are very similar for all practical purposes to those in graded school districts, while the duties of the district officers under either form are almost identical.

The duties pertaining to a district board, at the present time, consist chiefly in the following: It has the custody of all the school property of the district; reports taxes to the supervisor of the township for assessment; manages the district moneys; purchases and leases sites for school-houses and builds school-houses, as may be directed by the district; fills vacancies occurring in its own number; employs all teachers that may be necessary for the schools; provides for at least the minimum amount of school in each year, and for as much more as the district may vote at its annual meeting,—a district having less than thirty children between the ages of five and twenty years, must maintain school at least three months during the school year or forfeit its public moneys; a district having thirty children or over of like age must maintain a school at least five months, or a district having eight hundred children or more must support a school at least nine months, on pain of like forfeitures of public moneys. It is also made the duty of the district board to prescribe the text-books to be used in the schools, to arrange courses of study to be pursued in the schools, and to establish all necessary rules and regulations for the government and management of the schools. In addition to these duties, the board of a graded school district is required to establish a high school, when the same has been authorized by a vote of the district at its annual meeting.

The moderator is the presiding officer at district and board meetings, and

among other duties he is required to countersign all contracts when properly authorized, and all warrants and orders on the school funds, when lawfully drawn.

The director is the clerk and executive officer of the board. Among his many duties he is required to keep the records of proceedings at all district and board meetings; to draw and sign contracts as they may be properly authorized; to draw and sign warrants and orders on the school funds, when lawfully directed; to give notices of all district meetings; to take the annual census of children between the ages of five and twenty years residing in the district, and to make annual reports of all affairs of the district to the township board of school inspectors.

The assessor is the treasurer of the district, and has the custody of all school district moneys. He is also required to appear in behalf of the district in all proceedings at law, when no direction concerning such proceedings has been given otherwise by the district. Previous to 1843 all taxes voted by the district were assessed and collected by the assessor, and from this fact originated the title of the office. During that year, however, the law was so amended that the duty of assessing such taxes was transferred to the supervisor of the township, and their collection to the township treasurer, of which officers those duties have ever since been required.

In nearly all the incorporated cities of the State, and in several of the larger villages, the schools have been organized during later years under special enactments, which have made such provisions for the government and management of the schools in such cities or villages as seemed best adapted to their immediate needs. These several enactments are so dissimilar in character, and provide for boards so variously constituted, that no general description of their provisions can be undertaken in this connection.

From the annual reports of the boards of school inspectors, the following table has been compiled, in order to show the whole number of school districts, including all kinds, that were reported each year from 1836 to the present:

Year.	Number of Districts.	Year.	Number of Districts.	Year.	Number of Districts.	Year.	Number of Districts.	Year.	Number of Districts.
1836	55	1845	2,683	1854	3,465	1863	4,382	1872	5,369
1837	382	1846	2,869	1855	3,514	1864	4,426	1873	5,521
1838	1,020	1847	2,942	1856	3,525	1865	4,474	1874	5,571
1839	1,325	1848	3,071	1857	3,748	1866	4,625	1875	5,706
1840	1,506	1849	3,075	1858	3,946	1867	4,744	1876	5,834
1841	2,215	1850	3,097	1859	3,968	1868	4,855	1877	5,947
1842	2,312	1851	3,307	1860	4,087	1869	5,052	1878	6,094
1843	2,410	1852	3,383	1861	4,203	1870	5,108	1879	6,252
1844	2,518	1853	3,410	1862	4,268	1871	5,299	1880	6,352

District Taxes.

The first enactment concerning schools contemplated and provided for raising school revenues by means of district taxes, and this plan has been followed ever since, the power to levy such taxes being modified to a greater or less extent from time to time. Notwithstanding this it was found difficult, in the earlier days of the State's existence, to raise the funds necessary to carry on the schools, and, consequently, the Legislature, in 1843, sought to provide for the difficulty by enacting the "rate-bill" law. Under this system, whatever was lacking to meet the expenses of the school was raised by a tax assessed

upon and paid by the parents and guardians of the children that attended school, in proportion to the time such children were sent to school. If not readily paid, this tax was collected by distress and sale of property of the parent or guardian. The natural result of this law was that the schools would have a fair attendance as long as the public funds would meet the expense, but when these were exhausted, poor men, uncertain as to how heavy the rate-bills might be, would withdraw their children from school. This tended to produce a panic, as the less number of pupils there were remaining in school, the heavier the tax would be on those parents who kept their children in the school, and as a consequence the schools were not unfrequently broken up. The Constitution of 1850 required the Legislature to provide for free schools at a time not later than 1855, but for some inexplicable reason the Legislature deferred action to that end until 1869, when it repealed all the provisions of the rate-bill law, thereby making the schools absolutely free to all alike.

The power of districts to vote taxes, became, after several years, by repeated amendments, almost unlimited, and it was found that it was very often abused. This fact led the Legislature, in 1875, to restrict that power, so that, at the present time, a district, having less than ten children in its school census, cannot vote a tax for building purposes to exceed $250; districts having ten to thirty children, cannot vote a like tax to exceed $500; and districts having from thirty to fifty children cannot exceed $1,000. For other purposes, for which taxes are voted by the district, a sum not exceeding one-half the amounts above named may be levied. The amount to be raised by tax for teachers' wages and other expenses necessary to the current support of the school is now determined by the district board, and not subjected to a vote of the district. This amount is not limited by the statute, except in districts having less than thirty children, in which case the board cannot levy more than $50 per month for the time that the school is maintained.

The following table exhibits the amount of district taxes reported to the Superintendent of Public Instruction each year from 1839 to 1880:

YEAR.	Amount of Tax.	YEAR.	Amount of Tax.	YEAR.	Amount of Tax.
1839	$50,106 57	1853	$129,476 88	1867	$874,304 18
1840	59,120 38	1854	156,916 90	1868	1,070,561 53
1841	54,640 11	1855	232,134 41	1869	1,308,618 78
1842	58,259 61	1856	240,803 41	1870	1,742,578 87
1843	44,705 90	1857	304,572 23	1871	1,749,407 89
1844	56,021 77	1858	316,580 71	1872	1,977,759 93
1845	59,931 62	1859	246,247 36	1873	2,095,220 17
1846	92,854 90	1860	292,924 47	1874	2,393,604 73
1847	94,495 81	1861	329,463 81	1875	2,341,923 71
1848	103,852 52	1862	245,813 43	1876	2,261,119 55
1849	124,890 23	1863	233,125 25	1877	2,217,960 99
1850	128,189 45	1864	364,246 55	1878	2,176,164 75
1851	130,196 38	1865	473,908 73	1879	2,049,755 29
1852	114,675 69	1866	634,088 31	1880	2,074,073 37
Total taxes reported					$31,705,297 13

To the foregoing may be added the following amounts, derived, for the years named, under the provisions of the "rate bill" law. Previous to 1846, the

amount thus raised each year was not reported, or was indiscriminately included in the district taxes.

YEAR.	Amount of Rate-bill.	YEAR.	Amount of Rate-bill.	YEAR.	Amount of Rate-bill.
1846	$26,558 71	1854	$63,763 43	1862	$43,202 76
1847	30,887 27	1855	83,932 84	1863	41,200 54
1848	30,402 06	1856	100,009 49	1864	50,202 80
1849	29,717 88	1857	121,651 14	1865	90,664 00
1850	32,318 75	1858	118,099 89	1866	103,151 07
1851	69,085 37	1859	104,869 20	1867	107,170 91
1852	37,833 36	1860	67,484 87	1868	110,886 26
1853	44,099 58	1861	56,469 29	1869	94,752 55
Total amount reported as raised by rate-bill					$1,658,414 02

DISTRICT INDEBTEDNESS.

In 1855 an act was passed by the Legislature which gave to any school district, having more than three hundred children between the ages of five and twenty years, the power and authority to borrow money to pay for a site for a union school-house, and to erect and furnish buildings. The amount of money that could be thus borrowed was limited to $15,000. When such a loan was authorized by a vote of two-thirds of the qualified voters, the district board was required to issue the bonds of the district in sums of not less than $50 each, with such rate of interest, not exceeding ten per cent. per annum, and payable at such times as the district directed. This law has, since that time, been amended, so that the present enactment provides that any school district may, by issuing its bonds, borrow money to be used for the purposes previously named. The amount which a district may borrow is limited according to the number of children included in the school census of the district, while the amount of money that can be raised by tax for the purposes of purchasing a site or building a school-house in small districts is also limited in the year in which bonds are issued. It is further provided that the bonded indebtedness of a school district shall in no case extend beyond ten years for money borrowed.

It appears from the records and reports in the office of the Superintendent of Public Instruction that previous to the year 1863, the statistics of district indebtedness were not collected. The following table will show the amount of bonded indebtedness of the districts, reported each year since that date:

YEAR.	Indebtedness.	YEAR.	Indebtedness.	YEAR.	Indebtedness.
1863	$112,266 02	1869	$917,027 87	1875	$1,723,456 01
1864	161,935 90	1870	961,409 94	1876	1,558,584 45
1865	221,703 45	1871	1,146,569 14	1877	1,484,524 67
1866	235,785 26	1872	1,234,686 85	1878	1,364,977 91
1867	439,476 38	1873	1,574,124 36	1879	1,325,700 00
1868	643,991 49	1874	1,734,890 29	1880	1,293,451 55

Township School Taxes.

In addition to district taxes, from the organization of the school system until the present, a township tax for the support of schools has been levied. In the original enactment it was made the duty of the supervisors to add to the sums to be raised in each township a sum equal to that apportioned to the township from the income of the primary school fund. In 1841 an amendatory act was passed giving to the electors of any township, at the annual township meeting, authority to raise any sum of money, for the support of common schools in their township, as they might deem expedient, provided that such sum did not exceed one dollar for each child in the township between the ages of five and seventeen years. In 1843 an act amending previous acts was passed, which provided that the supervisor in each township should assess, for the support of schools, for the year 1843, twenty-five dollars; for 1844, a tax of one-half of a mill upon each dollar of the taxable property of the township; for 1845, and annually thereafter, one mill on each dollar of the total valuation of the taxable property of the township. In 1851 this tax was raised to two mills on the dollar; in 1853 it was changed back to one mill; in 1859 it was again raised to two mills, and in 1879 again placed at one mill. The money raised by means of this tax can be used only for school and library purposes, and is apportioned to each district in the township, by the township clerk, in the same manner as the primary school interest fund.

The peculiar care of the State for the schools is shown in the fact that out of all the taxes collected in the township, all school taxes *assessed*—without reference to the amount *collected*—shall be paid, or reserved in the township treasury, before moneys can be paid for any other purpose, except for township expenses. It sometimes has happened that these two objects have absorbed all the taxes collected in a township, leaving nothing for the county or the State.

The amount of township or mill tax raised each year from 1842 to 1880, inclusive, as reported to the Superintendent of Public Instruction, is shown in the following table. No report of such taxes was made previous to 1842.

Year.	Amount of Tax.	Year.	Amount of Tax.	Year.	Amount of Tax.
1842	$1,120 14	1855	$83,961 30	1868	$309,219 38
1843	1,697 19	1856	91,780 47	1869	323,246 12
1844	2,084 22	1857	102,519 12	1870	405,111 64
1845	5,521 67	1858	116,362 04	1871	409,541 20
1846	6,579 51	1859	129,524 42	1872	421,971 29
1847	7,368 75	1860	262,130 80	1873	465,912 84
1848	15,020 44	1861	267,813 43	1874	466,065 05
1849	17,830 13	1862	248,934 28	1875	506,551 87
1850	17,957 30	1863	265,656 07	1876	512,889 31
1851	17,140 59	1864	250,380 67	1877	492,146 94
1852	30,009 91	1865	281,770 74	1878	514,774 20
1853	48,672 30	1866	288,820 06	1879	494,011 38
1854	67,179 55	1867	289,967 63	1880	379,757 93
Total amount of tax reported					$8,621,021 89

Total Resources of School Districts.

In addition to the moneys derived from the primary school interest fund, the township and district taxes, and the rate-bills, the total resources of school districts have been increased, to a greater or less extent, each year, by tuition collected from non-resident pupils, moneys derived from a surplus of the dog-tax collected in townships and cities, occasional contributions of individuals, and by various other means. In order to present the total amount of funds received by the school districts each year, as near as the same can be ascertained from the annual reports and other records, the following table has been prepared:

Year.	Total Resources.	Year.	Total Resources.	Year.	Total Resources.
1836		1851	$269,265 85	1866	$1,573,354 07
1837	$23,171 54	1852	287,551 43	1867	1,985,411 18
1838	59,063 65	1853	297,512 31	1868	2,478,532 25
1839	70,355 53	1854	366,506 48	1869	2,759,096 94
1840	78,338 06	1855	499,967 31	1870	3,271,299 28
1841	65,430 03	1856	447,905 89	1871	3,330,972 80
1842	74,869 67	1857	536,071 49	1872	3,650,058 76
1843	65,695 26	1858	551,042 64	1873	3,729,648 54
1844	86,182 05	1859	599,819 37	1874	4,094,775 34
1845	87,690 61	1860	659,949 99	1875	4,176,977 91
1846	154,924 97	1861	754,710 60	1876	3,877,117 16
1847	158,151 75	1862	745,253 16	1877	3,753,671 09
1848	185,172 83	1863	827,625 60	1878	3,859,831 05
1849	213,744 16	1864	955,077 71	1879	3,843,790 84
1850	217,026 49	1865	1,237,514 54	1880	3,789,197 95
Total resources					$61,749,326 13

Expenditures of School Districts.

As will be seen from the preceding table, the financial resources of school districts, as reported from 1837 to 1880 inclusive, aggregate $61,749,362.13. Taking this sum and deducting the amount of moneys remaining on hand, September 6, 1880, which is reported as being $679,282.83, the total expenditures by school districts for all purposes, for the forty-four years included, amount to $61,070,043.30. The amount of expenditures each year, as well as the purposes for which the payments were made, were not reported in any complete form previous to 1862, consequently the amounts applied to each purpose for years preceding that date cannot be definitely ascertained. Previous to 1874, the amounts paid on bonded indebtedness were not reported separately, but were included in the expenditures for "other purposes." The following table has been compiled from the reports of the school inspectors to the Superintendent of Public Instruction, and exhibits the expenditures for the years named for the several items of teachers' wages, building and repairs, bonded indebtedness, and other purposes, including incidental expenses:

YEAR.	Paid Men Teachers.	Paid Women Teachers.	Paid for Building and Repairs.	Paid on Bonded Indebtedness.	Paid for all Other Purposes.	Total Expenditure
1862	$221,865 24	$269,428 31	$112,877 96		$84,900 59	$689,072 [illegible]
1863	195,263 49	324,748 53	92,604 34		107,584 10	720,200 [illegible]
1864	209,049 38	371,478 65	134,504 22		154,030 97	868,063 [illegible]
1865	208,990 78	492,610 38	175,471 82		170,100 56	1,047,173 [illegible]
1866	269,539 95	524,216 95	339,620 71		225,140 26	1,358,517 [illegible]
1867	336,064 95	572,234 52	545,437 30		287,701 56	1,741,428 [illegible]
1868	382,639 04	643,380 90	805,705 88		309,158 80	2,140,884 [illegible]
1869	430,901 81	728,559 05	776,074 00		465,983 60	2,401,518 [illegible]
1870	549,703 31	842,098 30	852,122 62		545,629 55	2,789,553 [illegible]
1871	601,389 13	916,879 50	662,896 11		648,342 02	2,829,506 [illegible]
1872	639,401 13	1,010,087 63	625,843 61		746,253 55	3,021,585 [illegible]
1873	681,565 24	1,071,309 43	597,006 68		788,902 96	3,138,784 [illegible]
1874	731,796 48	1,173,657 23	536,307 28	$384,954 41	600,901 48	3,427,616 [illegible]
1875	749,943 90	1,208,537 25	550,661 64	398,106 41	619,112 98	3,526,362 [illegible]
1876	786,886 15	1,228,816 95	451,426 49	369,780 20	620,949 84	3,457,859 [illegible]
1877	750,512 36	1,184,448 50	317,842 13	385,613 51	533,339 62	3,171,756 [illegible]
1878	750,189 36	1,184,540 55	296,520 86	338,347 59	540,942 45	3,108,540 [illegible]
1879	712,594 79	1,160,865 26	364,135 38	329,466 96	497,576 49	3,064,638 [illegible]
1880	714,072 85	1,195,868 23	356,240 02	333,938 48	509,795 57	3,109,915 [illegible]
Totals	$9,922,359 37	$16,103,766 11	$8,593,298 55	$2,538,207 56	$8,456,346 95	$45,613,978 [illegible]

SCHOOL ACCOMMODATIONS.

The duty of providing a school-house in each district has been required since the beginning of our school system. The provisions of law relative to raising taxes for building purposes have already been noted. In the earlier days, in the absence of any regulating enactment, some districts failed to exercise a proper degree of care in securing, previous to building, sufficient titles or leases to the sites for their school-houses. The subject having been brought to the attention of the Legislature, an amendment to the laws was passed in 1846, which required every district to have a title in fee simple, or a lease for ninety-nine years, to a site before building a stone or brick school-house on such site; it also provided that no frame school-house should be erected unless the district had a title in fee simple, or a lease for fifty years, to the site, unless the district secured the privilege of removing the school-house whenever lawfully directed by the qualified voters. Acting in accordance with this requirement, many districts soon found that they were unable, from various causes, to secure a clear title or even a sufficient lease to the site determined upon. This fact led the Legislature, in 1855, to pass an act for the relief of such districts by which, in any case, certain proceedings might be taken that would secure to the district any site that might be selected.

The character of the school-houses that have been erected has been various, and has depended very largely upon the culture and liberality of the people that have formed the districts. In some districts, a few citizens of enlarged and progressive views have been able to infuse a similar spirit into the minds of their neighbors, and, as a consequence, in such districts school-houses have been built and furnished in a style that has proved the delight of pupils and teachers and the pride of the patrons; while the children of an adjoining district have often been required to assemble in a miserable hovel, ycleped "school-house," built with less taste, and attended to with less care, than the horse-barns of many of the fathers of the injured pupils.

As has already been stated, the original provisions for schools in Michigan contemplated but one school-house and the employment of but one teacher in

each district, and made no distinction between the different circumstances of the most sparsely populated settlements and the growing cities and villages. At the time of the passage of these laws there were probably very few villages large enough to furnish more pupils than could be accommodated in a single school-house, but in a very few years the increase of population was such that, in many instances, one school-house was not sufficient. The consequence was that a division of the district ensued, and a new school-house was built. Then soon after there would be a necessary "swarming of hives," and another division was made and a third district created. Thus, in many villages there were formed, in a very few years, two, three, and four independent districts, with as many inclosures dignified with the name of school-houses. But the people of these cities and villages were not satisfied to continue this "divide and scatter" system, and therefore the formation of union school districts was authorized by the Legislature of 1843, and an act was soon afterward passed which gave to such districts power to erect a central school-house. As an outgrowth of this legislation, and the formation of such districts, there is now no city, and scarcely a village, in the State, that has not one or more large and commodious school-houses to attract the eye as prominently as its churches and other public buildings. And the size and external beauty of these houses are not all that is worthy of note,—the inside arrangements and furniture, the means for warming and ventilating, as well as the care and ornamentation of the grounds, have all received their share of attention and liberal outlay.

It is unfortunate that complete statistics relative to school accommodations were not collected for quite a number of years. The following table, however, exhibits some items in this connection, from 1860 to 1880, as far as reported. The amount paid for building and repairs each year from 1862 to 1880 has already been given in the table showing the expenditures of school districts:

YEAR.	Number of School-Houses and Material of Construction.				Whole Number of Sittings in School-Houses.	Estimated Value of School Property.
	Stone.	Brick.	Frame.	Log.		
1860	.....	.....	.....	.....	.....	$1,633,647 03
1861	.....	.....	.....	.....	.....	1,710,834 35
1862	.....	.....	.....	.....	.....	1,673,258 00
1863	.....	.....	.....	.....	.....	1,868,204 58
1864	.....	.....	.....	.....	.....	2,085,372 38
1865	.....	.....	.....	.....	.....	2,355,982 00
1866	67	329	3,376	723	.....	2,854,990 00
1867	73	375	3,509	665	.....	3,361,567 00
1868	72	416	3,609	618	.....	4,384,081 00
1869	74	459	3,766	621	.....	5,331,774 00
1870	78	538	3,867	627	.....	6,234,797 00
1871	77	570	4,024	629	374,760	7,155,995 00
1872	79	595	4,153	591	382,107	7,470,339 00
1873	80	641	4,246	605	399,067	8,105,391 00
1874	81	682	4,390	549	407,072	8,912,698 00
1875	79	719	4,476	513	414,060	9,115,354 00
1876	80	745	4,577	529	426,611	9,257,094 00
1877	81	780	4,683	534	431,707	9,159,680 00
1878	82	786	4,753	538	435,071	8,937,091 00
1879	78	802	4,878	567	441,291	9,011,454 00
1880	75	816	4,949	560	446,029	8,977,844 00

School Census.

For the purpose of forming a basis for the apportionment of public moneys to the school districts, the laws, from the beginning of the State's existence, have provided that an annual census of children should be taken in each district. Under the territorial laws a census of children between the ages of five and sixteen was required to be taken, but no reports of the same are now to be found prior to the first report of Superintendent Pierce, for 1836. The first state enactment provided that the enumeration should include children between the ages of five and seventeen; in 1843 the limit of ages was changed so as to include those between four and eighteen, and in 1861 this limit was again changed, requiring the school census to include all children between five and twenty years. Since that time the law has remained unchanged.

The following table exhibits the number of children reported in each year from 1836 to 1880. The rapid increase, in the earlier years, was doubtless, to a large extent, made up of reports received from new districts, where the children were previously residing, but unreported, and therefore does not prove a proportional increase in population. A decrease appears in 1841, while the ratio of annual increase in other years varies considerably. These may probably be accounted for by the fact that a greater or less number of districts failed to report some years, although having reported previously; the several changes made in the ages included in the enumeration had also, doubtless, much to do with the differences.

Year.	Ages.	Number of Children.	Year.	Ages.	Number of Children.	Year.	Ages.	Number of Children.
1836....	5 to 16	2,337	1851...	4 to 18	143,272	1866...	5 to 20	321,136
1837....	5 to 17	15,471	1852...	"	150,531	1867...	"	338,244
1838....	"	34,000	1853...	"	160,453	1868...	"	354,753
1839....	"	45,892	1854...	"	173,117	1869...	"	374,774
1840....	"	48,817	1855...	"	187,549	1870...	"	384,554
1841....	"	47,066	1856...	"	202,274	1871...	"	393,275
1842....	"	54,790	1857...	"	215,928	1872...	"	404,235
1843....	4 to 18	66,756	1858...	"	227,010	1873...	"	421,323
1844....	"	80,475	1859...	"	237,541	1874...	"	436,694
1845....	"	90,006	1860...	"	246,802	1875...	"	449,181
1846....	"	97,658	1861...	5 to 20	252,533	1876...	"	459,808
1847....	"	108,130	1862...	"	261,328	1877...	"	469,444
1848....	"	117,952	1863...	"	273,620	1878...	"	476,806
1849....	"	125,218	1864...	"	280,772	1879...	"	486,993
1850....	"	132,234	1865...	"	298,607	1880...	"	506,221

School Attendance.

Previous to 1869 the laws had not definitely designated who had a right to attend school, and in the absence of a direct statutory enactment, the Superintendents of Public Instruction for several years previous held that no person who was a proper subject for education could be excluded; but this opinion was sometimes disputed. In the meantime, a case arose which was carried to the Supreme Court, in which the board in a certain district refused to admit a colored child to the school. It was an ugly question, and in view of the large powers of district boards, and the silence of the statute upon the subject, it is not certain but the decision of the court would have been in favor of the district board. The Legislature of 1869 removed the necessity for a decision by enacting that "All persons, residents of any school district, and five years of

age, shall have an equal right to attend any school therein." In one city an attempt was then made to establish a "colored school," and in 1871 the following was added to the law: "And no separate school or department shall be kept for any persons on account of race or color." In addition to the points mentioned it will be observed that the only requirement as to age that is necessary to entitle persons to school privileges is that they shall be not less than five years. Some have thought that the limits of ages,—five to twenty,—named in the law providing for the school census, restricted the right to attend school, but this is an erroneous impression, as the school census is taken simply to secure a basis for the distribution of public moneys. No upward limit is named, and consequently, any one who desires and who can be benefited by attending school, is entitled to the fullest privileges of the schools, regardless of the age over five to which he or she may have attained.

The following table exhibits the whole number of children reported as in attendance upon the public schools each year from 1836 to 1880 inclusive:

YEAR.	Number of Children Attending Public Schools.	YEAR.	Number of Children Attending Public Schools.	YEAR.	Number of Children Attending Public Schools.
1836	2,377	1851	115,165	1866	246,957
1837	6,943	1852	103,266	1867	243,161
1838	28,764	1853	113,792	1868	250,996
1839	44,067	1854	129,517	1869	269,587
1840	47,901	1855	142,307	1870	278,686
1841	51,254	1856	153,116	1871	297,466
1842	56,173	1857	162,936	1872	303,534
1843	55,555	1858	173,594	1873	307,014
1844	70,277	1859	183,759	1874	327,506
1845	75,770	1860	193,107	1875	343,931
1846	77,807	1861	202,504	1876	345,096
1847	88,080	1862	207,332	1877	357,139
1848	98,044	1863	216,144	1878	359,702
1849	102,871	1864	215,736	1879	342,138
1850	110,478	1865	228,629	1880	362,196

When considering the entire number of children in the State who have annually been brought into school relationship, there should be taken into account, in addition to the numbers given in the foregoing table, the number of pupils attending private and select schools each year. It is to be regretted that the statistics of such schools have not always been carefully gathered. Attempts have been made in this direction at occasional intervals in the history of the State, but the items furnished have lacked uniformity, and have consisted chiefly of estimates. The number of pupils in attendance upon these schools, as reported each year since 1863, appears in the following table:

YEAR.	Estimated Number of Children Attending Private Schools.	YEAR.	Estimated Number of Children Attending Private Schools.	YEAR.	Estimated Number of Children Attending Private Schools.
1863	4,708	1869	8,807	1875	7,934
1864	4,279	1870	9,613	1876	8,033
1865	6,276	1871	8,772	1877	8,958
1866	8,320	1872	8,189	1878	10,634
1867	10,703	1873	6,761	1879	18,253
1868	11,917	1874	5,845	1880	18,854

Supervision of Schools and Teachers.

From the very inception of our school system until the present the subject of supervision of schools and teachers has received greater or less attention, and yet, strange to say, a satisfactory method has not, as yet, been adopted. Superintendent Pierce, in his first report to the Legislature, presented very fully the importance of competent supervision by means of an intelligent inspection of teachers and schools. The first enactment provided for the examination of teachers and the visitation of schools by the township board of school inspectors. This plan was followed for three years, when the Legislature, for some reason now unknown, repealed that portion of the law which required the visitation of schools, and as a consequence, the inspectors, in most instances, remained away from the schools and left the pupils to do as they pleased and the teachers to plod along without counsel or sympathy. Such being the case, Superintendent Sawyer, in his report for 1841, appealed to the Legislature for a change, and also stated his conviction that the township board of school inspectors, for various reasons, could not be expected to fulfill the original purposes of their appointment. He therefore recommended the enactment of a law which would provide for a supervisory authority that would be coëxtensive with the county, whose duty should be to examine all teachers, visit all schools, collect statistics, see that the laws were efficiently executed, ascertain their defects, suggest improvements and otherwise promote sound education. The Legislature, however, did not see fit to adopt his suggestions, but in 1843 restored to the township board of school inspectors the requirement of visitation in a modified form. This provision was such that the inspectors were to appoint one of their number to visit each school in the township, at least once each term, and he was to inquire into the condition of the schools, examine the pupils, and give such advice to both teachers and pupils as he might deem beneficial. This method of visitation, in connection with the examination of teachers by the board of school inspectors, constituted all there was of supervision of the common schools for twenty-four years, although the necessity for a better system was frequently presented and urged upon the Legislature.

In the meantime, the people of the cities and larger villages were led to see the folly of attempting to conduct their schools in the loose manner provided, or of leaving them without any oversight at all. Special enactments were therefore petitioned for, which were granted by the Legislature, and which gave to such cities and villages authority to provide for such supervision as they might desire for their respective schools. In consequence of such special enactments, and also under the provisions of the general law for graded and high schools, competent and intelligent supervision has been secured in many schools. In the larger systems, the persons employed as superintendents devote their entire time to the oversight of the schools, while in the smaller ones they give that part of their time not required for supervision to teaching some of the more advanced classes. The benefits of this superintendence are most manifest and are seen in the order and system which prevail, instead of the disorder and confusion of former times. The improved methods of instruction, also, which have been introduced into these schools, the grading of the schools, and the classification of the pupils, are results of this intelligent supervision, while the improved courses of study, and the rapid progress of the pupils in these courses, make evident its advantages.

But the wants and needs of the country schools were not met by any of the changes which secured the advantages of good supervision to the cities and

villages, and consequently they were left subject to the imperfect plan provided by the primary school laws. It therefore remained for the Legislature of 1867 to take a step in advance by enacting a law which provided for county superintendents of schools. By this act such officers were to be elected biennially at the spring election for a term of two years. The duties of the county superintendents, required by this act, consisted chiefly in examining and licensing all teachers for the public schools of the county, and in visiting each of the schools of the county, at least once in each year, in order to examine carefully into the discipline and the modes of instruction, and into the progress and proficiency of the pupils; to counsel with the teachers and district boards as to the course of studies to be pursued, and for the improvement of the instruction and discipline of the schools. He was also to note the condition of the school-houses and appurtenances thereto, and to suggest plans for new school-houses to be erected, and for warming and ventilating the same, and the general improvement of school-houses and grounds; to inquire into the condition of district and township libraries, and to counsel, when necessary, for their better management, and to see that the money collected from fines, etc., was devoted to the support of the libraries; to promote by public lectures and teachers' institutes, and by such other means as he might devise, the improvement of the schools in his county, and the elevation of the character and qualifications of the teachers; to consult with the teachers and school boards toward securing the more general and regular attendance of children upon the public schools; and to examine the annual reports of the inspectors, and to make reports of his own labors to the Superintendent of Public Instruction. This mode of supervision was hailed as a grand advance by a large number of the more earnest friends of education, and great expectation of the improvement of the schools was entertained. Although the scheme in many respects was faulty, yet the efforts and influence of the superintendents were conducive to much good, and a wide contrast was soon made manifest between the schools taught under its operations and those of former years. But its defects were seized upon by those who had, from the beginning, opposed it, and every opportunity was taken to cripple and belittle it. As a consequence, a weight of popular opposition was brought against it, to which the Legislature, without any attempt to remedy the defects, yielded, and in 1875 repealed all of its provisions, and inaugurated in its stead the present system of township superintendency of schools. The act providing for township superintendents of schools imposes upon those officers duties and responsibilities very similar to those formerly required of the county superintendents, but limiting their jurisdiction to the townships in which they hold office, and their term of office to one year.

Examination and Employment of Teachers.

Under every state enactment, as well as by the territorial provisions concerning schools, the examination and certification of teachers have been required, and the employment, at public expense, of any teacher not duly qualified by holding a certificate from proper legal authority has been prohibited. The original state law provided that candidates for teachers' certificates should be examined as to their knowledge of the several branches of study usually taught in the primary schools, their moral character and their ability to teach and govern a school. It will be observed that no particular branches were named, a knowledge of which should be required by the inspectors, neither were various grades of certificates provided for. When the inspectors were satisfied that the candidates possessed the requisite qualifications, they were to grant certificates

Graded Schools.

All the early schools of Michigan were from necessity ungraded schools, and no attempts were made for several years after the organization of the school system of the State to introduce anything looking toward the grading of any of the schools. The cities and villages were the first to seek and secure such legislation as would enable them to provide for the instruction of a large number of pupils together, and such classification as would facilitate that instruction and render it more effective. The first city to organize its schools into one system was Detroit. By an act passed at the session of the Legislature in 1842, the city was united in a single district, with a board of education, to which was granted full powers over the whole subject of public school education within the limits of the city. The next act of legislation looking toward the grading of schools was that of 1843, providing for the formation of union school districts, to which allusion has already been made. This law provided that "whenever the board of school inspectors of any township shall deem that the interests of any of the school districts will be best promoted by so doing, they may form a single district out of any two or more districts therein, and classify the pupils in such district into two or more classes, according to their proficiency and advancement in learning, and require that such pupils be taught in distinct schools or departments as classified by them, and such district may have the same number of school-houses, if necessary, and raise the same amount of taxes which the original districts forming the same could raise if not united." Among the first to be organized under the provisions of this law were the schools of Jonesville, Flint, Coldwater, Marshall, and Battle Creek. Other cities and villages were not slow in recognizing the advantages to be gained by being so organized, and before many years had elapsed a considerable number had availed themselves of the provisions of this law. But the decade from 1850 to 1860 was very largely a period of experiment in the history of the union and graded schools. Considerable opposition was manifested in various quarters, and as a consequence there was not that rapid growth that otherwise might have been expected. The system had earnest friends, however, who, by intelligent and ceaseless efforts, kept its advantages before the people, and ably defended it from the assaults of its enemies. By means of this agitation, it constantly gained friends, public sentiment was very largely brought to its support, and a foundation was laid that has never been disturbed in the succeeding years. In the meantime, it was found that the provisions of the law were too limited as to the powers granted the districts, and as a consequence several cities, led by force of their necessities, asked for and obtained from the Legislature special enactments. This fact, united with the experience of sixteen years, prepared the way for the law of 1859, which gave to any district, having not less than two hundred children between the ages of four and eighteen years, authority to organize as a graded and high school district, and granted to districts that might so organize much greater powers than could be secured under the previous general law. Two or more adjoining districts might also, under this enactment, be united to form a graded school district. In 1861 this law was changed so that districts having at least one hundred children between the ages of five and twenty years, might be organized under its provisions. This enactment has since that time remained materially unchanged, and under its provisions the graded school districts of the State have increased until they now number nearly four hundred, while through the intelligence and liberality of the people, these schools have attained a high degree of development, and compare favorably with those of any other State.

passed in 1857 which gave authority to the board of instruction of the State Normal School to issue to certain graduates of the school a diploma and certificate, which should serve as a legal certificate of qualification to teach in any of the public schools of the State. The provisions of this law still remain unchanged. No state or normal school certificate is liable to annulment except by the authority which granted it, but the effect of any certificate may be suspended in any township by the proper supervisory authority of the township.

The laws providing for the employment of teachers have given this duty exclusively to the district board. The present enactment requires that all teachers employed shall be duly qualified by having a valid certificate from a proper legal authority; that all contracts for teaching shall be in writing and signed by a majority of the board on behalf of the district, The contract must specify the wages agreed upon, and shall require the teacher to keep a correct list of the pupils attending the school, the age of each, and the number of days each pupil is present, and to furnish the director of the district with a correct copy of this register at the close of the school. By other provisions of the laws, and of contracts, the teacher is held responsible to the district board for the efficient discharge of every duty properly attaching to the office of teacher, including the oversight and preservation of school buildings, grounds, furniture, apparatus, and other school property, as well as the more important work of instruction and government.

In collecting the statistics relative to the employment of teachers it has been impossible to ascertain anything of a definite character for several of the years. The following table exhibits the whole number of teachers reported as having been employed during the years 1845 to 1850 and 1855 to 1880 inclusive; previous to 1845, and during the four years intervening between 1850 and 1855, it appears that the number employed was not reported. This table also shows the average monthly wages of teachers during the years 1845 to 1849 and 1863 to 1880 inclusive, this item not having been reported for other years. In a preceding table, which shows the expenditures of school districts, the total amount of teachers' wages paid each year from 1862 to 1880 is given:

YEAR.	Number of Teachers Employed.		Average Wages of Teachers per Month.		YEAR.	Number of Teachers Employed.		Average Wages of Teachers per Month.	
	Men.	Women.	Men.	Women.		Men.	Women.	Men.	Women.
1845	1,214	1,839	$11 98	$5 24	1865	1,326	7,466	$41 77	$17 54
1846	1,209	1,981	12 71	5 36	1866	1,687	7,495	43 53	18 44
1847	1,316	2,181	12 87	5 74	1867	2,007	7,377	44 03	19 48
1848	1,413	2,436	13 71	5 97	1868	2,095	7,535	47 78	21 92
1849	1,435	2,618	14 14	6 46	1869	2,354	7,895	47 71	24 55
1850	1,475	2,612	.....	.....	1870	2,793	8,221	52 62	27 31
1855	1,600	3,474	.....	.....	1871	2,971	8,303	49 92	27 21
1856	1,775	3,746	.....	.....	1872	3,035	8,624	49 11	26 72
1857	2,131	4,605	.....	.....	1873	3,010	8,940	51 94	27 13
1858	2,326	4,905	.....	.....	1874	3,158	9,120	52 45	27 01
1859	2,444	5,068	.....	.....	1875	3,287	9,191	51 29	28 19
1860	2,586	5,335	.....	.....	1876	3,548	9,286	48 50	28 28
1861	2,326	5,484	.....	.....	1877	3,781	9,320	42 54	27 45
1862	2,380	5,958	.....	.....	1878	3,916	9,467	41 41	26 16
1863	1,918	6,907	28 17	12 44	1879	3,954	9,662	38 69	23 48
1864	1,816	7,000	34 00	16 63	1880	4,072	9,877	37 28	25 73

YEAR.	Number of Graded School Districts	Number of Children in School Census.	Number of Children Attending School.	Paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Estimated Value of School Property.
					Men.	Women.	
1859	54-58	39,422	25,832	$99,932 72	----------	----------	----------
1860	85	42,117	30,670	108,890 95	----------	----------	$511,520 25
1861	103 75	45,992	38,450	128,139 27	$51 75	$19 70	641,896 83
1862	106	55,378	44,774	136,994 67	48 64	23 60	676,207 07
1863	119	65,756	48,968	167,489 93	47 86	19 41	860,272 47
1864	123	69,025	49,934	186,900 27	55 52	21 38	898,774 70
1865	147	81,260	54,092	249,940 00	66 04	25 87	1,119,379 00
1866	148	87,130	59,298	280,486 58	68 90	28 20	1,407,505 00
1867	179	100,701	71,235	362,885 01	84 99	37 65	1,829,250 00
1868	208	111,963	79,867	421,676 29	77 92	30 35	2,480,300 00
1869	235	127,678	85,098	523,101 77	89 75	34 74	3,159,067 00
1870	248	134,634	91,692	610,478 35	97 07	36 11	3,895,287 00
1871	266	145,239	102,399	692,174 64	93 34	37 33	4,416,080 00
1872	300	155,740	110,096	783,535 42	91 60	34 81	4,784,141 00
1873	311	166,540	113,433	825,178 12	93 79	30 94	5,154,115 00
1874	327	178,204	121,919	914,253 02	93 92	32 54	5,485,161 00
1875	295	177,875	124,467	933,332 26	94 88	39 54	5,775,790 00
1876	303	202,454	125,849	975,104 84	89 01	40 95	5,823,171 00
1877	338	184,800	122,814	930,996 69	78 11	38 56	5,532,491 00
1878	350	193,764	131,868	971,254 67	75 98	38 34	5,480,425 00
1879	353	199,115	134,137	947,498 29	69 59	36 21	5,746,685 00
1880	389	213,712	141,153	997,066 94	67 93	36 02	5,826,718 00

PUBLIC HIGH SCHOOLS.

It will be observed that thus far in these sketches but little reference has been made to the public high schools of the State. As these schools are intended to supply the means for secondary education it has been thought proper to treat of them in that relation. Although thus removed from this connection, the fact must not be lost sight of that these schools constitute an integral part of the common school system of the State. The statistics of the high schools have not been collected apart from those of the graded schools, but are included in the totals given in the preceding tables.

SECONDARY EDUCATION.

I. BRANCHES OF THE UNIVERSITY.

The school system contemplated by the framers of the first Constitution and laws of the State embraced the widest field. Not only did that system provide for primary schools and a University, but it also included a plan for the establishment of schools of secondary grade, which should serve as a link between the two. These schools were to be denominated Branches of the University. Superintendent Pierce, in his first report to the Legislature, presented a plan which provided that any county containing a given number of inhabitants, should be entitled to an academy of the highest grade, as a branch of the University, on condition that the board of supervisors should procure an eligible site, and cause suitable buildings to be erected, such as should be deemed sufficient, and approved by the Superintendent of Public Instruction. The board of supervisors were to appoint six "wise and discreet persons," who, together with one appointed by the Superintendent, were to constitute the board of trustees. Of this academic board, the judge of probate and the two associate judges of the county, were to be *ex-officiis* members, and the county clerk, clerk *ex-officio* of the board. The trustees were to superintend its general concerns, appoint professors and teachers, and make a report to a board of visitors. This board was to consist of three persons, to be appointed annually, one by the supervisors, and two by the Superintendent. It was to be their duty to visit the academy at its annual examination, to inquire into its condition, examine the proceedings of the board of trustees, and forward their report to the Superintendent. For the support of these institutions it was proposed that the board of supervisors cause to be raised by the county a sum equal to that which should be apportioned to it from the income of the University fund. In each academy were to be three departments; one for the education of teachers, one for the higher branches of English education, and one for classical learning. The course of instruction for the teachers' class to be three years; this department to be open, without charge, to all who wished to fit themselves for the business of teaching, on pledge of teaching at least four years, under a forfeiture, if they did not. Tuition for the English department not to exceed ten dollars, and for the classical, twelve. Whenever any county complied with these requirements, it was to be entitled to an appropriation of $500 for the purchase of apparatus and books. In the teachers' department the following studies were recommended: the English language, writing and drawing, arithmetic, mental and written, and book-keeping, geography and general history combined, and history of the United States, geometry, trigonometry, mensuration and surveying, natural philosophy and elements of astronomy, geology

and chemistry, constitution of the United States and of the State of Michigan, select portions of the laws and duties of public officers, principles of teaching, rhetoric, algebra, the nature of man as a physical, intellectual and moral being, and his relative duties.

The first law under state legislation establishing the University, was approved March 18, 1837, and included provisions by which it was made the duty of the Regents of the University together with the Superintendent of Public Instruction, to establish such branches in the different parts of the State as should be authorized by the Legislature, and to prescribe needful rules and regulations. The branches were excluded from the right to confer degrees. In connection with every such branch, there was to be an institution for the education of females in the higher branches of knowledge, whenever suitable buildings should be prepared. In each of the branches there was to be a department of agriculture, with competent instructors in the theory of agriculture, including vegetable physiology and agricultural chemistry, and experimental and practical farming and agriculture. Whenever such branches were formed, there was to be in each a department especially appropriated to the education of teachers for the primary schools, and such other departments as the Regents deemed necessary. Whenever the branches were established, or any of them, there were to be apportioned to each, in proportion to the number of scholars therein, for the support of its professors and teachers, and also for the purchase of books and apparatus, such sums as the state of the University fund should allow.

The object and importance of the branches of the University were set forth in the Superintendent's report for 1838, in the following language:

> It is certainly of much consequence to the public interests that these branches be pushed forward with vigor, and be adequately sustained. They form the all-important connecting link between the primary schools and the University. They are specially intended to fit such young men for the regular classical course of the University, as wish to enter the institution; also to prepare some for the *profession of teaching*, that the primary schools may be fully supplied with competent instructors; and to qualify others for those numerous employments of life, which require a more extended education than is usually to be obtained at the district school. Unquestionably, then, they are essential to the successful and harmonious action of the system. Without them, every part of it must suffer, and every department languish. Without teachers, thoroughly educated and bred to the profession, what essential benefit can rationally be expected to result from the general establishment of primary schools?
>
> But where can we find such teachers, without furnishing the necessary means to fit them for the work, and where can we better do it than in the contemplated branches of the University? It is indeed of the first importance to the great interests of education in our own State, that these branches be well appointed and vigorously sustained. For the purpose of supporting the department for the education of teachers, it is suggested whether a small amount might not be appropriated to this object, from the income of the school fund? The proposed branches occupy the middle ground, being connected on the one hand with the primary schools, by the establishment of a department in each, for the education of teachers; and on the other with the University itself, by the establishment, in each of them, of a preparatory course, and being thus equally designed for the benefit of both the University and district schools, it seems no more than right and just that they should be supported from the funds of each.

The first formal report made by the Regents was dated January 5, 1839. In this report it is stated that at their first meeting, held June 5, 1837, the Regents had resolved to establish branches as soon as could conveniently be done; one in the first senatorial district, one in the second, two in the third, one in the fourth, and three in the fifth, making eight branches in all; and

$8,000 was appropriated to aid in the payment of teachers to be employed in them, when they were organized. Five of these they had organized and put in operation; one at Pontiac, one at Monroe, one at Kalamazoo, one at Detroit, and one at Niles; for all of which principal instructors were appointed. The number of pupils in all the several branches was reported to be 161, ten of whom were qualifying themselves as teachers for common schools, and six for the University. It was estimated that in 1840 thirty students would be ready to enter the Freshman or Sophomore classes; in 1841, thirty-five; in 1842, forty; and that the total number of students, whom parents designed for a liberal education, was 101. The Regents anticipated great accessions to this number. They remarked, as a matter of congratulation to the State at large, that "wherever a branch has been established, it has not only received the decided approbation and support of the inhabitants in its immediate vicinity, but has continued regularly to increase in the number of students from term to term." A uniform system of studies had been adopted, subject to such alterations as experience might suggest. The Regents further remarked "that the system of branches, their organization, board of visitors, support of instructors, and, in a word, everything connected therewith, being a new and untried experiment in our country, they feel the necessity and importance of proceeding with caution and deliberation." The branches established did not include any department for female education.

In 1840 the Regents announced the discontinuance of the branch established at Kalamazoo, and the establishment of one at White Pigeon, and one at Tecumseh. Six teachers were now employed as principals of branches, and six tutors, two of whom were females. The average number of pupils under instruction was two hundred and twenty-two. With a view to ensure uniformity in the system of instruction, in the discipline, and in books used, the principals of the branches were convened, and a uniform system adopted. One-tenth of the funds arising from tuition was pledged for the establishment of a library in each of these institutions. The Regents stated that from communications received by them, they had learned with regret that many young men who had sought admission into the branches had been turned away for want of appropriate places of study, and of boarding houses adapted to the wants and pecuniary abilities of the applicants for admission.

Superintendent Pierce, in his report for 1841,—his last communication to the Legislature,—expressed his deep conviction of the importance of maintaining the branches as a part of the school system. The parent institution, he maintained, could not succeed without them. Its main dependence from year to year must be upon the branches; and it was deemed to be equally important to the primary schools, as a source for educated, well-qualified and competent teachers.

The following is an extract from the report of the committee of Regents for 1841, to the Superintendent:

In organizing a Board of Regents to carry out the views of the Legislature, in the establishment of a University, it is conceived to have been the primary object of this body to extend its benefits as widely, and at as early a period throughout the State, as the wants of the community, and the means at their disposal would permit. Their attention was therefore called at as early a day as possible, to the location and establishment of branches of the University, at suitable points, where the elements of a classical and English education preparatory to the entrance of the students into the present institution, should be taught. This object has been steadily pursued, not only from its being the appointed means for preparing classes for the final collegiate course, but from the additional consideration that in a new and hastily settled community it would be one of the best and most practical means of arousing attention to the value and importance of the plan of education submitted to the people in the

organic act, and of thus preparing the public mind to appreciate and foster it. * * The committee on branches, charged with this duty, have encountered an arduous task in the management of the correspondence, the selection of principals, and the pecuniary questions which required decision and adjustment; and the board owe to it much of the success which has attended that effort. Of the seven branches established, five are under the direction of clergymen, and two of laymen of various religious denominations. The Board cannot, they believe, be mistaken in the importance they attach to the connection between learning and morals, science and religion, and at any rate, would be unjust to themselves not to express the belief that success cannot permanently crown the institution committed to their management, after this ligament is severed.

Twenty teachers and professors of all grades have been employed, who have instructed an average number of two hundred and thirty-six scholars. A steady increase of number has taken place in the respective terms for the year. At four of the branches, namely at Monroe, White Pigeon, Niles, and Tecumseh, there have been female departments under appropriate instructors, where only English branches have been taught. The effect of home schools in this department has been propitious, and they constitute a branch of higher instruction contemplated by the act, which has been appreciated by the inhabitants. In view of the whole amount of instruction furnished—its character and distribution, it may be asserted that in no previous year has the institution, through its branches, rendered equally important services to the State.

Superintendent Sawyer, in his first report, endorsed the views of his predecessor in relation to the importance of sustaining the branches. The Regents reported, however, that to continue the branches on the system originally established would be impracticable without further resources, and that those at command of the Board would not be sufficient to continue them for more than a year or eighteen months at furthest. The value of the branches was felt to be great, yet the importance of opening the main institution was still greater, inasmuch as the interests of education called for it, and all the necessary buildings and preparations had been completed. The idea was conceived that possibly now, since the branches had been established and were in successful operation, a change might be made in the system which would subject the Board to less expense, continue to foster the branches, and afford means to justify the opening of the University. A change therefore was resolved upon, and instead of the Board's undertaking to support the branches by paying the principals' and teachers' salaries, and receiving the avails of tuition, it was determined that from and after the 19th of August there should be the sum of $500 only appropriated to each branch, the principal to be allowed to appropriate the proceeds of tuition to his own use, and to be at the expense of employing and paying necessary assistants, as well as of meeting all expenses for repairing buildings. The effect of this change was the cessation of the branches at Pontiac, Monroe and Niles. The remainder continued to flourish and to extend their advantages to the places where they were situated.

In 1843 the Regents reported branches in continuance at Detroit, Kalamazoo, White Pigeon, Tecumseh and Ann Arbor, with a total number of 174 scholars. Pecuniary considerations had induced the Board to reduce the appropriations for sustaining them to $200 to each branch, exclusive of tuition fees. The principals at Tecumseh and White Pigeon resigned and two others were appointed. The Board of Visitors for this year stated that the Superintendent of Public Instruction and Regents had seemed to have appreciated the importance of establishing branches, as the means of a more general diffusion of the benefits of education, and of preparing students for the University, and regretted that it should have been necessary from the want of means, to make a retrograde movement in regard to them, by discontinuing those at Monroe, Pontiac and Niles, though they concurred in the prudential reasons which induced the step. They recommended as early a resuscitation and extension of

the system as an improvement in the financial condition of the University would admit.

The report of the Regents for the next year gave the number of students in attendance at the branches as 133. The academy at Romeo had been made a branch, and the branch at Monroe had been revived under the direction of Mr. Ira Mayhew, but without the aid of an appropriation.

In 1846 the Regents reported branches at White Pigeon, Kalamazoo, Romeo, Tecumseh, and Monroe, at which there had been a total attendance during the year of 247 students. The report for this year closes with the statement that "these institutions continue to be useful auxiliaries to the parent institution." In 1847 there were four branches reported, being those at White Pigeon, Romeo, Kalamazoo, and Tecumseh, in which were 287 students, of whom 126 were females.

At a meeting of the Board of Regents in August, 1848, the report of the committee on the branches showed but four of them in existence, and the Regents, after a careful examination, came to the conclusion that appropriations could not be made for such as were in existence, or for the establishment of others, without seriously trenching upon the resources, and limiting in a great degree the usefulness, and even endangering the success of the parent institution. From this period no appropriations were made to any of the branches, nor have we been able to find any reports from the branches, except the one at Romeo, which furnished a statement in 1851, giving the whole number of students as 201. Of these 43 were pursuing classical studies, 19 French, and 127 the higher mathematics and branches of English education.

Accompanying the report of the Regents for 1852 was a memoir written by Dr. Z. Pitcher, at the request of the Regents for the purpose of bringing before their successors a *resumé* of their acts and the reasons for the adoption of some of their more important measures, in such a form that it might serve as a guide for their action, or as a beacon to warn them, according as those acts might be approved or be regarded of doubtful utility. Speaking of the branches of the University, Dr. Pitcher said:

Having selected the site of the University, secured the means of erecting the buildings, purchasing the library, and of doing other things necessary to lay its foundation, it became apparent that the materials for the construction of the living edifice were not at hand. The blocks for the statuary were in the quarry, but there were no hands to hew them into form. Our political and social institutions were yet in a transition state. The common schools were then in chaos, and our whole system of public instruction in a state, at best, of inchoation. Believing that the attempt to establish or organize the University at this stage of our political existence, in this condition of the other educational institutions of the State, would prove abortive, the Regents resolved (as the constitutional authority or warrant for so doing had not then been questioned) to invert the order of things contemplated in the organic law, and to proceed at once to the establishment of branches as a means of furnishing the elements necessary to give vitality to the central institution, when the time for appointing its faculty should arrive. In order to carry this purpose into effect, the committee on branches were authorized to employ an agent to visit the different sections of the State and engage the coöperation of citizens living at such points as seemed most suitable for the establishment of branches, and to report his doings to the Board. This agent, who was restricted to eight localities, reported in favor of locating a branch at Pontiac, Detroit, Monroe, Tecumseh, Niles, Grand Rapids, Palmer, and Jackson, the citizens of which were required to furnish the site and the edifice necessary for the accommodation of pupils. On the fulfillment of these conditions, branches were organized at Monroe, Tecumseh, Niles, White Pigeon, Kalamazoo, Pontiac, Romeo and Detroit. A department for the education of females was added to the branches at Monroe, Tecumseh, White Pigeon, Kalamazoo and Romeo. Branches were also located at Mackinac, Jackson, Utica, Ypsilanti, and Coldwater, but no appropriations were ever made for their support. On the first organization of the Board of Regents, it included no

clerical members. For this reason, the University, then *in futuro*, was stigmatized as an infidel affair, which, it was predicted, would fail to perform the functions for which it had been endowed. This prediction was uttered with much confidence in certain quarters, and an act for the incorporation of a sectarian college was urged through the Legislature, partly by the force of an appeal to the religious feeling of the members, based on this accusation. Partly with a view to disarm that kind of opposition, and more especially because they believed it to be a duty, irrespective of it, the Board was careful to introduce the elements of religion into the branches, which they did by the appointment of clergymen of the different denominations as principals thereof. In the adoption of rules for the government of the branches, special care was taken to guard the common school interest from injury, by requiring candidates for admission to undergo a preparatory examination. Tuition was to be paid in advance. A treasurer was appointed for each branch who was required to make a report of the funds in his hands, at the close of each term. The course of study to be pursued therein was prescribed by the Board of Regents, which embraced the preparation of the pupil for college, his qualification for business, or for teaching, as he might himself elect. With the design of inducing young men who had been educated at the branches, to engage in the business of instruction, a regulation was adopted which authorized the treasurer to refund the money paid for tuition to all such persons as should furnish to him evidence of having been engaged in teaching, having regard to the time they had been thus employed. A board of visitors was also appointed for each branch, to whom such powers were delegated as seemed necessary to the practical working of the system.

Notwithstanding the pains taken to adapt these institutions to the public exigencies, so that their legitimate functions could be performed without infringing upon another portion of the educational system, they soon began to decline in popular estimation, because they were not able at the same time to perform the functions of a common school as well as those of a branch of the University. A feeling of jealousy was awakened in the minds of those whose children were excluded from them, from want either of age or of qualifications. Consequently they were soon regarded as places for the education of the (so called) aristocracy of the State, and the University, through the influence of the branches, began to be spoken of as an enemy to popular education. If an opinion may be formed of public sentiment by the tone of certain official papers, it would appear as though that feeling, instead of becoming extinct, has only changed the mode and place of its appearing. Finding that the branches were drawing largely upon the fund designed for the construction of the university buildings, and that they were not satisfactorily accomplishing the end for which they had been established, the Board of Regents, after mature deliberation, being fully assured that the expense of keeping them up was greatly disproportioned to the benefits accruing therefrom. suspended, in 1846, all appropriations for their support, after more than $30,000 had been expended in trying to sustain them. From this experimental though abortive effort to build up and sustain branches of the University, the Board have learned, and they deem the lesson of sufficient importance to leave it on record, that local institutions of learning thrive best under the immediate management of the citizens of the place in which they are situated, and when endowed or sustained by their immediate patrons.

II. INCORPORATED ACADEMIES AND SEMINARIES.

During the earlier years of the State's history quite a number of academies and seminaries were incorporated by special acts of the Legislature, in each of which more or less of intermediate instruction was given. Of the operations of nearly all of these institutions we have failed to find anything on record, and the fact that they were granted charters by the Legislature is the only evidence now obtainable that they ever had even a contemplated existence. Simultaneously with the decadence of the branches of the University, these incorporated academies and seminaries rapidly increased, and to these the people looked, to a considerable extent, for the accomplishment of the work previously expected of the branches. The most of these incorporated institutions were under the fostering care of various religious denominations. The Legislature, in granting charters, gave them a legal existence but extended to them no pecuniary aid. It was made the duty of the trustees of such institutions to submit annual reports to the Superintendent of Public Instruction, which

should exhibit the number of pupils in attendance, the state of the finances of the institutions, and the condition of all their departments. A large number of these charters were granted; whereof some never went into successful operation, and others were soon discontinued. Very few, if any of them, uniformly made the reports required of them by law. Under the first Constitution of the State the Legislature was at liberty to grant special acts of incorporation to each institution that might apply for the same; the revised Constitution, adopted in 1850, however, forbade the granting of special charters to any private corporation whatever, and consequently it became necessary, if any such institutions were to be incorporated, that the Legislature should enact a general law for the same. Such a law was passed in 1855, under the provisions of which has been effected the incorporation of all institutions of learning since that time.

During the decade from 1850 to 1860 there was much doubt as to whether the secondary schools should be made to form an integral part of the public school system of the State, or whether they should be left independent and entirely to the fostering care of private corporations. Superintendent Shearman, in his report for 1854, advised a return to the former plan of maintaining branches of the University, or, in lieu of the branches, the establishment of high schools as a part of the union school system. Superintendent Mayhew, however, in his report for 1855, and again in 1857, recommended that the various incorporated academies and seminaries be adopted by the State; that the State appropriate a fund for their aid; and that they be required to prepare students for admission to the University. The following are his remarks upon this subject:

> It is desirable to foster this class of institutions, both academic and collegiate, and to bring them thus into sympathy with our system of public instruction, of which they do, in fact, constitute a part, inasmuch as they, in connection with our improved union schools, are actually performing the work of intermediate instruction, for which the branches of the University were originally established. I then respectfully submit, whether justice to this class of institutions, and a due regard to the interests of sound learning and general education in the State, do not require that the Legislature make some suitable provision for their encouragement. A certain amount of capital might be required as a condition upon which they should receive aid, and institutions applying for it might be required to make a specific annual report, and might be subjected, as at present, to inspection by a board of visitors; and the amount of assistance rendered them might be equitably arranged, having reference to the number of scholars in attendance upon them that are prepared to pursue—and are actually pursuing—an advanced course of scientific and classical study, such as is requisite for admission to the State University, and to the colleges of our country, including, also, such as are actually pursuing a thorough collegiate course of study.

The recommendations of Mr. Mayhew, however, were not adopted by the Legislature, and as a consequence, the academies and seminaries gradually began to disappear before the advancing growth of the union school system. In 1859 Superintendent Gregory stated that it was not known precisely how many institutions of the academic grade remained; reports had been received from but few, and these were very meagre in the information they gave. Within the later years the number of incorporated academies and institutions of similar grade that have reported leads us to conclude that but few now exist. These have struggled hard for life, and it has been only by the most persistent, energetic and self-sacrificing efforts of their friends that they still remain. Notwithstanding the embarrassments and adversities with which these institutions have had to contend, many of them have done a noble work, and to them not a few of our citizens will ever look back with grateful recollection for the good that they have accomplished.

The following list presents the names, locations, and dates of incorporation, of the various academies and seminaries, as far as the same can now be ascertained:

NAME.	Location.	Date of Charter.
Academy at Ann Arbor	Ann Arbor	1830
Auburn Academy	Auburn	1831
White Pigeon Academy	White Pigeon	1831
Cass County Academy	Cassopolis	1833
Michigan and Huron Institute	Kalamazoo	1833
Michigan Manual Labor Institute	Washtenaw Co.	1833
Pontiac Academy	Pontiac	1833
Richland Academy	Richland	1833
Romeo Academy	Romeo	1833
Shelby Liberal Institute	Macomb Co.	1833
Spring Arbor Academy	Spring Arbor	1835
Marshall Academy	White Pigeon	1836
Tecumseh Academy	Tecumseh	1837
Grass Lake Academy and Teachers' Seminary	Grass Lake	1839
Marshall Female Seminary	Marshall	1839
Allegan Academy	Allegan	1843
Grand Rapids Academy	Grand Rapids	1844
Utica Female Seminary	Utica	1844
Ann Arbor Female Seminary	Ann Arbor	1845
Misses Clark's School	Ann Arbor	1845
Ypsilanti Seminary	Ypsilanti	1845
Adrian Seminary	Adrian	1846
Clinton Institute	Mt. Clemens	1846
Owosso Literary Institute	Owosso	1846
Vermontville Academical Association	Vermontville	1846
Woodstock Manual Labor Institute	Lenawee Co.	1846
Raisin Institute	Lenawee Co.	1847
White Pigeon Academy	White Pigeon	1847
Howell Academy	Howell	1848
Leoni Seminary	Leoni	1848
Olivet Institute	Olivet	1848
Oakland Female Seminary	Pontiac	1849
Tecumseh Literary Institute	Tecumseh	1849
Clarkston Academical Institute	Clarkston	1850
Young Ladies' Seminary	Monroe	1850
St. Mary's Academy	Bertrand	1850
Lawrence Literary Institute	Lawrence	1850
Dickinson Institute	Romeo	1855
Disco Academy	Disco	1855
German-English School	Detroit	1857
Colon Academy	Colon	1858
Lapeer Seminary	Lapeer	1858
Michigan Female Seminary	Kalamazoo	1858
Detroit Female Seminary	Detroit	1860
Michigan Collegiate Institute	Leoni	1860
German-American Seminary	Detroit	1861
Lansing Academy	Lansing	1863
Raisin Valley Seminary	Adrian	1863
Bedford Harmonial Seminary	Calhoun Co.	1865
German-English School	Grand Rapids	1865
Coldwater Female Seminary	Coldwater	1866
Fenton Seminary	Fenton	1868
Trinity School	Fenton	1868
Oak Grove Academy	Medina	1873
Spring Arbor Seminary	Spring Arbor	1874
Michigan Military Academy	Orchard Lake	1877
Somerville School	St. Clair	1880

Of the above named institutions several were subsequently changed to colleges, their names altered accordingly, and the sphere of their usefulness enlarged. Among these the following may be mentioned: Michigan and Huron Institute, which was chartered in 1833 and afterwards known as Kalamazoo Literary Institute, became re-incorporated in 1855 as Kalamazoo College; Spring Arbor Academy, chartered in 1835, but removed in 1839 to Albion and its name changed to Wesleyan Seminary, was in 1861 re-incorporated as Albion College; and Olivet Institute, chartered in 1848, became Olivet College by re-incorporation in 1859. Concerning these and other colleges of the State, more extended notice is given elsewhere in these sketches. Of the remaining institutions named in the preceding list, those that are known to be in existence at the present time are: Raisin Valley Seminary, located near Adrian; Young Ladies' Seminary of Monroe, at Monroe; Michigan Female Seminary, at Kalamazoo; German-American Seminary, at Detroit; Spring Arbor Seminary, at Spring Arbor; Michigan Military Academy, at Orchard Lake; and the Somerville School at St. Clair. Concerning several of these the following sketches may be of interest in this connection:

Raisin Valley Seminary

was originally known as Raisin Institute. It was founded in 1839 by Harvey Smith and Charles Haviland, Jr., and was incorporated by an act of the Legislature in 1847. During the first ten years of its existence it met with continued and increasing public favor, although it suffered from several reverses, among which was the death of one of its founders, Charles Haviland, Jr. But others became interested in the school, and as the decay of the temporary buildings, in which it had at first found accommodations, called for new and more substantial ones, the board of trustees succeeded in erecting and inclosing a building. A considerable amount had been expended upon it, when discouraging influences brought to bear upon the minds of stockholders caused its completion to be deferred. In the meantime the financial agent of the Institute and two of its trustees were removed by death, and these, with other causes, seemed necessarily to postpone the completion of the building and the re-opening of the institute for more than five years. Mrs. Laura S. Haviland, widow of Charles Haviland, Jr., became its agent, and the school was re-opened, thereafter meeting with continued success. In 1863 the Institute was re-incorporated under the name of Raisin Valley Seminary, and since that time it has gradually grown in strength, usefulness and public favor. It is now managed by the Adrian Quarterly Meeting of the Society of Friends. Erastus Test, M. D., is the principal of the Seminary, and he is assisted by two associate instructors. The value of the grounds, buildings and other property of the institution is estimated at $10,000, and the amount of its productive funds is stated as being $25,000.

The Young Ladies' Seminary and Collegiate Institute of Monroe

was organized during the fall of 1849, and opened for the admission of pupils December 1 of the same year. Rev. E. J. Boyd was chosen as its principal, in which position he remained until within a year or two past. The institution was incorporated by special legislative enactment in 1850, its first board of trustees consisting of Chas. Noble, Dan B. Miller, William H. Boyd, Robert McClelland, S. R. Arnold, George Landon, W. W. Clark, David A. Noble, Thomas G. Cole, N. R. Hascall, Ira Mayhew, H. H. Northrop, C. F. Lewis,

H. Morgan, Warner Wing, and Charles G. Johnson. From the beginning this Seminary has met with much success, having enrolled nearly three thousand pupils during the thirty years of its existence, about two hundred of whom completed its course of study by graduation. The amount of its real estate and other property is estimated at about $30,000, and its annual income at over $5,000.

Michigan Female Seminary

is located at Kalamazoo, and is under the control of the Presbyterian Synod of Michigan. The articles of association constituting it a corporation were adopted in 1856, but the raising of funds to put the school into operation was retarded by the financial depression of 1857 and subsequent years. As a consequence the building was not completed until the fall of 1866. As expressed in its charter, the intention of the founders of this institution was "to establish, endow and control a seminary of learning, for the education of young ladies in the higher branches of a thorough education, having reference to the entire person, physically, intellectually, morally and religiously considered; and to be essentially modeled after the Mount Holyoke Seminary in Massachusetts, founded by Mary Lyon, and the Western Female Seminary at Oxford." Although the institution is under the control of a religious denomination, yet any strictly sectarian influence in its management and teachings is guarded against by a provision of the charter, which requires that "religiously considered, the board of trustees shall secure the inculcation of a pure Christianity, without any reference whatever to any particular church, form or practice." Miss Jenneatte Fisher was, for a number of years, principal of the Seminary. She was succeeded in 1879 by Mrs. Esther E. Thompson, who remained one year. Miss Cornelia Eddy is the present principal, and is assisted by nine associate teachers. From the time of its first opening this institution has ranked among the first of its class, and has met with the most gratifying success. The seminary building is a fine, large brick structure situated on the north side of the Kalamazoo river, and its value, together with that of other property, is estimated at $50,000. The annual income of the institution ranges from $8,000 to $10,000.

Michigan Military Academy

is located at Orchard Lake in Oakland county. The demand for an institution in the Northwest, which should combine a system of military instruction with the studies ordinarily pursued in academies and colleges, led to the establishment of this Academy, and its incorporation in 1877. The degree of favor with which this institution has been received from the outset has proven that its founders were not mistaken as to the feasibility and ultimate success of the enterprise. Its superintendent is Col. J. Sumner Rogers, late of the U. S. army, who is assisted in the work of instruction by six associate teachers. The school has a three years' English and commercial course of study, a scientific and engineering course, a preparatory, and an elementary course. In all these courses military instruction is included. Arms and equipments are furnished by the War Department, the Academy thus receiving the recognition of the general government in addition to that given it by the State. Upon the recommendation of the visiting committee of the State University, the graduates of this Academy have been admitted to the University on diploma. The value of its grounds, buildings, and other property is estimated at $50,000, and its annual income averages about $28,000.

III. PUBLIC HIGH SCHOOLS.

The establishment of public high schools in connection with the union schools of the State, began to receive attention about the time of the retirement of the branches of the University, and it was believed and urged by many that such schools might and should be made to take the place of the discontinued branches. Superintendent Mayhew, in his report for 1848, thus mentions these schools: "This class of institutions, which may be made to constitute the connecting link between the ordinary common school and the State University, is fast gaining upon the confidence of the people. Some of them have already attained a standing rarely equaled by the academical institutions of older States." In his report for 1852, Superintendent Shearman took occasion to express his opinion that the organization of high schools in connection with the union schools of the State would both more effectually subserve the purposes for which common schools are established, and at the same time furnish more efficient auxiliaries to the University than its branches were during their existence. In proof of this, he deemed it proper to state that the union school at Jonesville had furnished candidates for admission to the freshman class of the University, prepared in the most satisfactory manner. This, he considered an important fact, as it tended to show what kind of fruits the union school might be made to produce, and what relation these two portions of the educational system might be made to bear to each other. There were those, however, who believed that the secondary schools should be left entirely to the care of private corporations, and, as has been already stated, the subject received much attention for several years. But the question soon settled itself as the incorporated academies disappeared before the advance of the union schools. In his report for 1859, Superintendent Gregory states that "the union school has vindicated its claim by the most practical of all tests, and henceforth we must look to these schools to supply the demand for higher intermediate education." In the same connection Mr. Gregory adds "I count it as the most beautiful feature of our school system that thus, up from the very midst of the primary schools, should grow these free academies, to carry forward the work of those schools, and to crown them with honor. They come not as strangers into the school system, claiming for themselves the post of honor, engrossing the best minds and best public sympathies, and fostering a pride that looks down with contempt upon the common schools as fit for only the poor and ignorant; but they grow up as kindred in the great family of schools, exhibiting the vitality of the system that gave them birth, and carry over to the whole public school system whatever of sympathy and love they may win. Like their sister schools, they invite all alike to their banquet of learning, and cement in firmer union the people who drink at their common founts."

From this time the public high schools continued to grow in numbers and usefulness, although in some places there was considerable opposition waged against their support by public taxation. This opposition culminated at last in a suit brought before the Kalamazoo circuit court by Charles E. Stuart and others against the school district of Kalamazoo to restrain the collection of such portion of taxes as had been voted for the support of the high school in that village, and for the payment of the salary of the superintendent. The court rendered a decision maintaining the legality of the tax, whereupon the complainants appealed to the Supreme Court of the State, which after a very

thorough and careful examination of the case, at the July term of the court in 1874, sustained the decision of the lower court. As this very able and interesting decision is a matter of historical importance, and forever sets at rest the question as to the legality of the public high schools, it has been deemed proper to insert it in full in this connection. The following is the decision:

The bill in this case is filed to restrain the collection of such portion of the school taxes assessed against complainants for the year 1872 as have been voted for the support of the high school in that village and for the payment of the salary of the superintendent. While, nominally, this is the end sought to be attained by the bill, the real purpose of the suit is wider and vastly more comprehensive than this brief statement would indicate, inasmuch as it seeks a judicial determination of the right of school authorities, in what are called union school districts of the State, to levy taxes upon the general public for the support of what in this State are known as high schools, and to make free by such taxation the instruction of children in other languages than the English. The bill is, consequently, of no small interest to all the people of the State, and to a large number of very flourishing schools it is of the very highest interest, as their prosperity and usefulness, in a large degree, depend upon the method in which they are supported, so that a blow at this method seems a blow at the schools themselves. The suit however, is not to be regarded as a blow purposely aimed at the schools. It can never be unimportant to know that taxation, even for the most useful or indispensable purposes, is warranted by the strict letter of the law; and whoever doubts its being so in any particular case, may well be justified by his doubts in asking a legal investigation, that, if errors or defects in the law are found to exist, there may be a review of the subject in legislation, and the whole matter be settled on legal grounds, in such manner and on such principles as the public will may indicate, and as the Legislature may prescribe.

The complainants rely upon two objections to the taxes in question, one of which is general, and the other applies only to the authority or action of this particular district. The general objection has already been indicated; the particular objection is that, even conceding that other districts in the State may have authority under special charters or laws, or by the adoption of general statutes, to levy taxes for the support of high schools in which foreign and dead languages shall be taught, yet this district has no such power, because the special legislation for its benefit, which was had in 1859, was invalid for want of compliance with the Constitution in the forms of enactment, and it has never adopted the general law (Compiled Laws, § 3742), by taking a vote of the district to establish a union school in accordance with its provisions, though ever since that law was enacted the district has sustained such a school, and proceeded in its action apparently on the assumption that the statutes in all respects were constitutional enactments, and had been complied with.

Whether this particular objection would have been worthy of serious consideration had it been made sooner, we must, after this lapse of time, wholly decline to consider. This district existed *de facto*, and we suppose *de jure*, also, for we are not informed to the contrary, when the legislation of 1859 was had, and from that time to the present it has assumed to possess and exercise all the franchises which are now brought in question, and there has since been a steady concurrence of action on the part of its people in the election of officers, in the levy of large taxes, and in the employment of teachers for the support of a high school. The State has acquiesced in this assumption of authority, and it has never, so far as we are advised, been questioned by any one until, after thirteen years' user, three individual tax-payers, out of some thousands, in a suit instituted on their own behalf, and to which the public authorities give no countenance, come forward in this collateral manner and ask us to annul the franchises. To require a municipal corporation, after so long an acquiescence, to defend, in a merely private suit, the irregularity, not only of its own action, but even of the legislation that permitted such action to be had, could not be justified by the principles of law, much less by those of public policy. We may justly take cognizance in these cases of the notorious fact that municipal action is often exceedingly informal and irregular, when, after all, no wrong or illegality has been intended, and the real purpose of the law has been had in view and been accomplished; so that it may be said the spirit of the law has been kept while the letter has been disregarded. We may also find in the statutes many instances of careless legislation under which municipalities have acted for many years, until important interests have sprung up, which might be crippled or destroyed, if then for the first time matters of form in legislative action were suffered to be questioned. If every municipality must be subject to be called into court at any time to defend its original organization and

its franchises at the will of any dissatisfied citizen who may feel disposed to question them, and subject to dissolution, perhaps, or to be crippled in authority and powers if defects appear, however complete and formal may have been the recognition of its rights and privileges, on the part alike of the State and of its citizens. it may very justly be said that few of our municipalities can be entirely certain of the ground they stand upon, and that any single person, however honestly inclined, if disposed to be litigious, or over technical and precise, may have it in his power in many cases to cause infinite trouble, embarrassment and mischief.

It was remarked by Mr. Justice Campbell in *People v. Maynard*, 15 Mich., 470, that "in public affairs where the people have organized themselves under color of law into the ordinary municipal bodies, and have gone on year after year raising taxes, making improvements, and exercising their usual franchises, their rights are properly regarded as depending quite as much on the acquiescence as on the regularity of their origin, and no *ex post facto* inquiry can be permitted to undo their corporate existence. Whatever may be the rights of individuals before such general acquiescence, the corporate standing of the community can no longer be open to question." To this doctrine were cited *Rumsey v. People*, 19 N. Y., 41, and *Lanning v. Carpenter*, 20 N. Y., 447. The cases of *State v. Bunker*, 59 Me., 366; *People v. Salomon*, 84 Ill, 41, and *People v. Lothrop*, 24 Mich., 235, are in the same direction. The Legislature has recognized this principle with special reference to school districts, and has not only deemed it important that their power should not be questioned after any considerable lapse of time, but has even established what is in effect a very short act of limitation for the purpose in declaring that "Every school district shall, in all cases, be presumed to have been legally organized, when it shall have exercised the franchises and privileges of a district for the term of two years."—Comp. L. 1871, § 3591. This is wise legislation, and short as the period is, we have held that even a less period is sufficient to justify us in refusing to interfere except on the application of the State itself.—*School District v. Joint Board, etc.*, 27 Mich., 3.

It may be said that this doctrine is not applicable to this case because here the corporate organization is not questioned, but only the authority which the district asserts to establish a high school and levy taxes therefor. But we think that, though the statute may not in terms apply, in principle it is strictly applicable. The district claims and has long exercised powers which take it out of the class of ordinary school districts, and place it in another class altogether, whose organization is greatly different, and whose authority is much greater. So far as the externals of corporate action are concerned, the two classes are quite distinct, and the one subserves purposes of a higher order than the other, and is permitted to levy much greater burdens. It is not very clear that the case is not strictly within the law; for the organization here claimed is that of a union school district, and nothing else, and it seems little less than an absurdity to say it may be presumed from its user of corporate powers to be a school district, but not such a district as the user indicates and as it has for so long a period claimed to be. But however that may be, we are clear that even if we might be allowed by the law to listen to the objection after the two years, we cannot in reason consent to do so after thirteen. It cannot be permitted that communities can be suffered to be annoyed, embarrassed and unsettled by having agitated in the courts after such a lapse of time questions which every consideration of fairness to the people concerned and of public policy require should be raised and disposed of immediately or never raised at all.

The more general question which the record presents we shall endeavor to state in our own language, but so as to make it stand out distinctly as a naked question of law, disconnected from all considerations of policy or expediency; in which light alone are we at liberty to consider it. It is, as we understand it, that there is no authority in this State to make the high schools free by taxation levied on the people at large. The argument is that while there may be no constitutional provision expressly prohibiting such taxation, the general course of legislation in the State and the general understanding of the people have been such as to require us to regard the instruction in the classics and in living modern languages in these schools as in the nature not of practical and therefore necessary instruction for the benefit of the people at large, but rather as accomplishments for the few, to be sought after in the main by those best able to pay for them, and to be paid for by those who seek them, and not by general tax. And not only has this been the general state policy, but this higher learning of itself when supplied by the State, is so far a matter of private concern to those who receive it that the courts ought to declare it incompetent to supply it wholly at the public expense. This is in substance, as we understand it, the position of the complainants in this suit.

When this doctrine was broached to us, we must confess to no little surprise that

schools as may make application for inspection, and report to the faculty as to the courses of study pursued and the character of the instruction given in such high schools. If any high school thus visited is found to have adopted and is pursuing a preparatory course of study that meets the requirements for admission to the literary department of the University, its graduates are admitted upon their diplomas without further examination. This designation of the high schools by the Regents of the University, as the legitimate preparatory schools, has enlarged their sphere, increased their responsibilities, and dignified their work. Thus has been solved the problem as to intermediate schools in the State, and in consequence our educational system has become complete and connected, thereby providing for a continuous course of free instruction from the lowest primary grade to the highest class of the University.

FRANCIS W. SHEARMAN.

HIGHER EDUCATION.

I. THE UNIVERSITY OF MICHIGAN.*

ENDOWMENT.

The negotiations which led to the first appropriations for university purposes in the Northwest Territory were commenced in the year 1786 by the Ohio Company, and concluded the following year by a contract for the purchase of one and a half million of acres of the public lands. In this contract, in addition to a reservation for schools and religious purposes, was a provision for the grant of two entire townships as an endowment for a university. These two townships were selected together at Athens, in Ohio, and the University located upon them. The year after, John Cleves Symmes, of New Jersey, and his associates, made application for the purchase of another large tract of land, which comprehended what is now Cincinnati. In this contract provision was also made, besides every sixteenth section for school and every twenty-ninth section for religious purposes, for an appropriation of one entire township for a university. It was a condition of the contract between the government and the purchasers of the tract that within seven years from the completion of the survey, unless Indian irruptions rendered it impracticable, they should lay off the whole contract at their own expense into townships and fractional parts of townships and divide the same into lots according to the land ordinance of 1785. In 1788 the quantity of land first applied for by Judge Symmes was reduced by a subsequent contract to one million of acres and the right to a college township thereby lost.

In 1804 by an act for the disposal of public lands in the Indiana Territory, three townships were reserved "for the use of seminaries of learning," one of which was for that portion of the territory now constituting the State of Michigan. In 1805 the act of Congress organizing the Territory of Michigan, among its other provisions, conveyed this township to the Territory for the endowment of a university. This appropriation, however, seems to have been of no advantage to the Territory, save, perhaps, as an indication of a policy to which the government desired to make no exception. It was not until 1817 that the inhabitants of the Territory had sufficiently multiplied to make it worth the while to think much of a university or even to locate the university lands. This delay was probably fortunate for the cause of education, though for a time its consequences afforded great embarrassment. When at last an effort was make to select the university lands, it was found that they were required to be chosen from those to which the Indian titles had been extin-

*A considerable portion of this article has been copied from Prof. C. K. Adams's "Historical Sketch of Michigan University," published in 1876.

guished before the grant had been made. It was often difficult and sometimes impossible to determine when titles had become extinct; and, what was quite as unfortunate, the lands earliest abandoned by the Indians were the lands least desirable for the University. The guardians of the interests of higher education, therefore, found themselves in a somewhat embarrassing dilemma. They were compelled either to accept of such lands of insignificant value as they might be able to locate, or to address themselves to Congress for relief. The latter method was adopted, and a committee was appointed to prepare and present the necessary memorial. It was in answer to this memorial that Congress made the grant upon which the present endowment rests. By an act approved May 20, 1826, Congress annulled the previous grant, and gave in its place two entire townships. The advantage to the University of this legislation did not consist merely in the larger number of acres afforded, but came quite as much from the fact that the privilege was given of locating the lands in detached portions, and of selecting them from any part of the public domain not otherwise appropriated.

The news of this grant was received with enthusiasm in the Territory. A committee was at once appointed by the Board of Regents "to examine the country and report fully their opinion in regard to the location of the lands." Employing a competent surveyor, this committee at once set about its task; and to the wisdom and energy with which the work was accomplished very much of the subsequent prosperity of the University is due.

The two townships of land conveyed by Congress to Michigan as an endowment for the University, when compared with amounts since granted to other states, were by no means exceptional in quantity. On the contrary, very many of the states now occupying the place of the old Northwestern Territory have received much larger appropriations for the same purpose. If the grant to Michigan has been productive of exceptional results, it is owing to the fact that lands were selected of exceptional value. With so much wisdom, indeed, had the lands been chosen, that in ten years from the time the grant had been made, they were estimated by the Superintendent of Public Instruction to have attained an average value of twenty dollars per acre. Nor, if we are to judge exclusively from the sums received for lands sold, does this estimate appear to have been extravagant. In January, 1837, the Superintendent, in his first report, declared that it was more than probable that the first 20,000 acres could be sold at once for as much as $20 per acre, and that the remaining 26,080 acres could be sold at the same rate as soon as the funds should be needed. The views expressed in this report appear to have been shared by the Legislature; for, by an act approved March 21, 1837, the Superintendent of Public Instruction was authorized "to sell at auction so much of the university lands as should amount to the sum of $500,000, none of which were to be sold lower than $20 per acre."

By the report for the following year we learn that in pursuance of this enactment sales amounting to more than $150,000 were made, and that the average price realized was as much as $22.85 per acre. Thus it appears that the Legislature formally committed itself to the policy of selling the university lands at a price of not less than $20 per acre; and, furthermore, that the sales made under the act justified the expectation that the price designated would be realized. It was in view of this virtual pledge of the Legislature, and of the sales negotiated in the course of the ensuing year, that the active work of organizing the University was begun. No time of realization had, indeed, been designated; but it was confidently believed by the Board of Regents that

immediate sales under the act of 1837 would afford a sufficient income for the temporary wants of the University, and that at no very distant day the full amount of at least $921,600 would be received as a permanent endowment.

But this confident belief of the guardians of the University was doomed to a bitter disappointment. A series of legislative acts ensued which made it certain that the ultimate endowment of the University would be much less than had been confidently anticipated. There may be, at the present time, some reason to doubt whether the full sum would have been realized within a reasonable period, even if the Legislature had adhered to the policy of 1837. It is, indeed, quite possible that the financial distress of the years following the act would have made it difficult, within a reasonable time, to negotiate sales at the price designated. It is obvious, however, that this fact was not the ground of the legislative action. A mere reference to the time and nature of the acts will show that such is the case.

When the Superintendent, under the act of March 21, 1837, attempted to bring the lands into market, it was found that very many of them had come to be occupied by settlers. An investigation proved that in every instance the occupation had taken place after the lands had been regularly located for the University. Manifestly, therefore, the occupation furnished no just claim for redress. But the occupants, when they saw the lands which they had quietly occupied, it might be for years, about to be taken from them, were so loud in their clamors that the Legislature did not resist the appeal. By an act approved March 20, 1838, or within a single year of the act which authorized the sale of lands, the Legislature went so far as to release 10,240 acres of university lands that had been located as early as 1830. Although, by the conditions of the releasing act, the University was to receive an equal amount of new lands, and such as might be appraised to be of equal value, it was found to be impossible to fulfil these conditions. The best lands had been the first to be located, and for that very reason it was impossible to find unoccupied lands in 1838 of the same value as many that had been located in 1830. The University had chosen the best of lands in 1830; and, of the lands thus chosen, the best had, by very reason of their excellence, come to be occupied by settlers. Thus the loss sustained by the University was two-fold: a loss of eight years, during which all the best lands had been rapidly going out of market, and a loss of all the advance in the value of lands located eight years before.

Other legislation of a similar character followed. In the course of the same year a bill passed both houses authorizing the sale at $1.25 per acre of a large quantity of university lands that had been occupied by settlers. Fortunately, however, Governor Mason had been led to foresee the dire results that would be sure to follow in case the bill should become a law. He therefore vetoed the act, pointing out in his message that such legislation would be fatal to the value of the university fund, and even intimating that the bill had been carried by "a wholesale propagandism in search of adventurers to claim university lands."

Although this veto of Governor Mason saved the fund from the annihilation which seemed to await it, the nature of the legislation which followed discloses a painful want of understanding of the real interests of the University.

In 1838 and 1839 the Legislature extended the time of payment to purchasers of university lands. In 1840 nearly 5,000 acres were authorized to be sold at an average price of $6.21 per acre, a price which brought to the University some $65,000 less than would have been realized, had the lands been sold at the minimum price established in 1837. Still further, in 1841, the

minimum price was reduced to $15 per acre, and in 1842 to $12 per acre. Worst of all, this latter reduction was even made retrospective. The county judges and county surveyors were constituted into adjudicating boards with power to appraise anew lands already sold, and, in case it was determined that a lower price should have been fixed upon than the price at which they were sold, the Superintendent of Public Instruction was authorized to credit the purchaser with the difference. The result of this policy is made clear by the report of the Superintendent for 1843. It is there shown that $34,651 had been either returned or credited to purchasers. The total sales up to the time of this report had amounted to $220,000; but the effect of the various acts of relief and retrospective legislation had been to reduce the amount realized for the University to about $137,000, a sum which was $83,000 less than the amount for which the lands had been actually sold.

There appears to be nothing to justify the supposition that this unfortunate legislation was prompted by corrupt motives. Speculation and an unsound currency had raised prices above their normal rates; and when the reaction set in, it was probably believed that the prices fixed upon in 1837 had been higher than could be realized within any reasonable period. It is, however, to be said that no time of realization had been designated, and that if all effort to effect sales had been postponed until a later period, the price determined upon might in all probability have been realized. Such a postponement would have involved, perhaps, a postponement of the inauguration of the University. There is doubtless therefore something to be said in defense of the policy pursued. But it is, at least, a question whether it was not more desirable that the University should ultimately come into possession of a large endowment, even if it could do so only by a postponement of its organization for a few years, than that it should open its doors at once at the expense of its ultimate development. However this question may be answered, the result of the policy pursued was to reduce the sum ultimately realized from the sale of lands to about $450,000. This sum, it will be noticed, is somewhat less than one-half of what had been confidently anticipated at the time of the legislation in 1837.

In 1838 the Board of Regents, in anticipation of a large ultimate income, applied to the Legislature for a loan of $100,000 for the purpose of organizing the University and erecting the necessary buildings. The manner in which this application was received is quite enough to show that, however unwise some of the acts of the Legislature may have been, the members were prompted by no feelings of hostility; for the Legislature not only granted the loan, but also provided for relieving the University from the direct payment of either principal or interest. This latter result was accomplished by an act authorizing the State Treasurer to receive from the University certain depreciated state warrants at par, and to credit the same on the loan, and also authorizing the sale of university lands for similar warrants to be accredited in like manner. There is direct evidence that this provision was effectual in reducing and ultimately canceling the debt. In 1846 the Governor's message declares that the debt had been reduced by means provided for in the act to $43,225, and two years later a similar message shows that it had been brought down to $20,000.

We learn from the proceedings of the Board of Regents for December 23, 1852, that the debt at that time had been entirely extinguished. It is a curious circumstance, however, that notwithstanding the complete liquidation of the debt thus brought about, the Legislature for a considerable number of years regularly remitted the interest as though it were still due from the University. From 1852 to 1859 neither the Board of Regents nor any of the state officials,

either legislative or executive, appear to have been aware that the debt had been paid. The matter seems to have been misunderstood by many, some contending that the State owed the University $100,000, and others claiming that the indebtedness was exactly the other way. However, since 1853, the State has treated the amount as practically a donation to the University, and in 1877, the Auditor General, by virtue of a resolution of the Legislature of that year, made it on the records a part of the university fund, and so the $100,000 has actually and justly been given by the State.

The university lands, with the exception of 377.26 acres, have all been sold, and the amount of the fund and the income, September 30, 1880, was as follows:

In the hands of the State	$465,788 46
Due from purchasers	73,190 08
Total university fund	$538,978 54
Income	38,426 98

It became evident at an early period in the history of the University that the endowment fund would be inadequate to the growing wants of the institution. In 1867 the Legislature manifested a willingness to grant assistance. An act was accordingly passed giving to the University an annual appropriation of about $15,000; but accompanying the act was a condition which required that at least one homœopathic professor should be appointed in the department of medicine. The effect of this proviso was to bring on one one of the most exciting contests in the history of the University. It was urged by some that an acceptance of the appropriation with its attached condition would endanger the medical school. In this opinion the Regents eventually concurred, and accordingly did not accept it. Two years later, however, the Legislature not only removed the proviso, but paid over to the University the accumulations of two years,—somewhat more than $30,000. Still further, in 1873, the appropriation was increased by substituting in the place of the amount annually granted, a twentieth of a mill tax on all the taxable property of the State, a tax from which the University receives at the present time about $31,000 per annum.

In 1875 the Legislature made a number of important appropriations for special objects, aggregating 44,500. In 1877 special appropriations were also made to the amount of $49,000; while in 1879, the similar appropriations made aggregate $75,000. By these acts the income of the University for each of the years was very largely increased.

In connection with the fund obtained from the sources above named should be mentioned the income derived from the fees of students. The only charges made by the University are such sums as have been found to be necessary for the payment of incidental expenses. Students from Michigan are required to pay a matriculation fee of ten dollars and an annual fee of twenty dollars; while residents of other states or countries pay an admission fee of twenty-five dollars and an annual fee of twenty-five dollars. The payment of these sums entitles the student to all the privileges of the University. The only additional expenses of the student arise from the payment for material actually consumed, as for example, in the study of applied chemistry or of practical and comparative anatomy; and a fee of ten dollars for diploma at the time of graduation.

The following table has been prepared to show the amount of moneys received

each year by the University, from 1839 to 1880, from income on permanent funds, legislative appropriations, and other sources. The first two columns are compiled from the official reports of the Auditor General, and are reliable, while the third has been made up from various sources and can be considered in regard to the earlier years as only approximately correct:

YEAR.	Income from Permanent Funds.	Legislative Appropriations.	Receipts from Other Sources.	Total Resources.
1839	$9,433 13			$9,433 13
1840	6,402 91			6,402 91
1841	2,263 61			2,263 61
1842	10,146 45			10,146 45
1843	994 83			994 83
1844	3,688 48			3,688 48
1845	10,040 68		$403 94	10,443 72
1846	4,816 94		509 25	5,326 19
1847	11,915 00			11,915 00
1848	19,020 34		1,448 71	20,469 05
1849	6,090 43		915 62	7,006 03
1850	9,644 70		1,006 87	10,651 57
1851	9,315 33		2,364 95	11,680 28
1852	11,493 57		2,297 67	13,791 24
1853	14,874 57		2,876 94	17,751 51
1854	28,119 93		3,491 78	31,611 71
1855	36,753 00		3,344 84	40,097 84
1856	34,575 16		3,584 72	38,159 88
1857	34,635 34		3,607 20	38,242 54
1858	35,425 01		3,884 59	39,309 60
1859	29,026 07		4,146 73	33,172 80
1860	44,142 77		5,705 43	49,848 20
1861	19,499 82		5,976 86	25,476 68
1862	56,199 72		6,340 30	62,540 02
1863	32,374 48		6,620 00	38,994 48
1864	42,538 80		10,421 10	52,959 90
1865	39,469 44		20,580 78	60,050 22
1866	37,415 82		18,768 00	56,183 82
1867	38,877 33		20,190 15	59,067 48
1868	39,744 37		25,686 00	65,430 37
1869	38,400 00	$38,197 02	22,139 00	98,736 02
1870	38,157 95	18,849 58	22,039 04	79,046 57
1871	39,000 00	15,000 00	22,664 75	76,664 75
1872	38,550 00	52,500 00	23,352 52	114,402 52
1873	38,341 00	90,500 00	23,196 88	152,037 88
1874	38,590 00	27,375 00	31,927 71	97,892 71
1875	38,475 91	49,500 00	40,010 41	127,986 32
1876	38,371 32	58,000 00	46,599 66	142,970 98
1877	38,264 36	59,000 00	51,725 12	148,989 48
1878	32,299 97	60,125 00	62,574 42	154,999 39
1879	46,921 95	90,625 00	59,024 43	196,571 38
1880	34,734 02	94,750 00	63,209 50	192,693 52
Totals	$1,129,910 91	$654,421 60	$622,634 97	$2,406,967 48

GOVERNMENT.

During the territorial period of the history of Michigan, the interests of higher education were committed to a board of trustees consisting of the Governor and the Judges. As early as 1817, a curiously elaborate plan of a university was adopted by this board. As the whole Territory, at that time, how-

ever, did not contain more than about 6,000 souls, it was obviously impracticable as yet to organize the institution. There were no students, and, indeed, there was no endowment. The instrument, therefore, to which we refer is interesting chiefly as showing the purposes of the officers of the Territory and the ideal which they hoped ultimately to realize.

This early organization of the board was not, however, without its good results; for, to the University, as thus provided for, were entrusted the interests and direction of the subordinate schools. In 1821 an act was passed repealing that of 1817, and establishing an institution to be called the "University of Michigan" in the city of Detroit. To this new institution were transferred all the educational powers enjoyed by its predecessor. The board was empowered to "establish such colleges, academies, and schools, depending upon said University, as they might deem proper and the funds should permit." This board was, furthermore, entrusted with the entire charge of the land granted to the University by Congress in 1804, as well as with the sections reserved for the same purpose in 1817, at the treaty with the Indians at Fort Meigs. It is sufficient in this connection to say that this board continued to administer the affairs of higher education until a state constitution was adopted, when the Territory was admitted to the Union in 1836.

Although no university proper was established, it is of importance to note that the board of trustees, during the whole of this period, continued to superintend the schools which they had established; and, furthermore, that the schools under their superintendence played a very important part in the early history of the University. It was of inestimable advantage, when the institution was finally opened, that there were in the State a number of good preparatory schools. It remains only to be said of this territorial period that, by a decision of the Supreme Court in 1856, the continuity of the corporations of 1817, 1821, and 1836 was affirmed,—in other words, that the three are to be regarded as a single institution.

When Michigan became a state, an important change occurred in the method by which the University was to be controlled. The Constitution provided for the appointment of a Board of Regents by the Governor and the Senate. Accordingly, on the 21st of March, 1837, the Senate confirmed the appointment of twelve persons nominated by the Governor. These and their successors, together with the Governor, Lieutenant Governor, and Judges of the Supreme Court constituted the Board of Regents from 1837 to 1852.

This method of making up the Board of Regents was doubtless unfortunate. The men appointed were almost without exception prominent politicians. The new board contained not a single educator, and but two men who had been members of the old board of trustees. If there had even been a president of the University to give general direction to the work of organization, this want of experience on the part of the Regents would not have been so serious. There was, perhaps, not a single person on the Board to whom positive objection could be urged; yet the members were nearly all engaged in public affairs of another nature, and, consequently, the University was of secondary importance. By the very constitution of the Board the same men who gave direction to affairs in the Legislature gave similar direction in the Board of Regents. When, therefore, the Legislature was found unable to resist the clamors of settlers on university lands, it would have been marvelous indeed if any very effective protests had been urged by the Board of Regents. Even the feeble remonstrances made were shorn of all power by the fact that in many instances, the very men who had favored them in the board opposed them in the Legislature

It is difficult to resist the conviction that very much of the ill management of the university lands already referred to might easily have been prevented had the Board of Regents been made up of men of undivided allegiance.

The amended Constitution, adopted in 1850, provided for an important change in the method of appointing the Board of Regents. This change was effected by the following constitutional provision:

> There shall be elected in each judicial circuit, at the time of the election of the judge of such circuit, a Regent of the University, whose term of office shall be the same as that of such judge. The regents thus elected shall constitute the Board of Regents of the University of Michigan. * * * The Board of Regents shall have the general supervision of the University, and the direction and control of all expenditures from the university interest fund.

By this constitutional provision the most serious defects of the previous Board were corrected. Some changes in detail have since been adopted, but in the main the University has, from 1852 till the present time, been administered in accordance with the spirit and the letter of the article just quoted. It was obviously an error to provide for the entire renewal of the Board at each election, and it was soon thought unwise to restrict the election of regents to single districts. Changes for the purpose of correcting these errors have accordingly been made. At the present time the Board consists of eight Regents, elected by the people for the term of eight years, two of the number being chosen from the State at large at each biennial election.

A study of the development of the University since 1850 will hardly fail to show the wisdom of the constitutional changes made at that time. The remarkable growth of the institution is unquestionably due in great measure to the watchfulness and the wisdom of the Regents chosen by the people of the State to be its guardians. The experience of Michigan goes very positively to show, not simply that the University is safe under the control of men elected by the people, but that its affairs are likely to be administered with prudence and with wisdom.

Establishment and Development.

The relations of the University to the other parts of the educational system of the State were established at a very early date. In 1817, some twenty years before Michigan became a State, the Governor and Judges, to whom the interests of higher education were committed by the territorial government, drew up and adopted the following law, which may be viewed as a curiosity in the history of education, both on account of its peculiarity of language and of the means provided for its support. It was, however, no unusual thing at that early day to provide for the establishment of literary institutions, schools and colleges, and for benevolent and religious enterprises and purposes by the organization of lotteries. The law was adopted and published from the laws of the seven original states mentioned in its last clause, by reason of a provision of the Ordinance of 1787, that the laws which the Governor and Judges made and published, both civil and criminal, were to be so taken, and suited to the circumstances of the Territory, and reported to and sanctioned by Congress, until the people were entitled to the organization of a General Assembly:

> AN ACT to establish the Catholepistemiad, or University of Michigania.
>
> *Be it enacted by the Governor and the Judges of the Territory of Michigan*, That there shall be in the said Territory a Catholepistemiad, or University, denominated the Catholepistemiad or University of Michigania. The Catholepistemiad or University of Michigania shall be composed of thirteen didaxum or professorships; first, a didaxia

or professorship of catholepistemia, or universal science, the didactor or professor of which shall be President of the institution; second, a didaxia or professorship of anthropoglossica, or literature, embracing all the epistemum or sciences relative to language; third, a didaxia or professorship of mathematica, or mathematics; fourth, a didaxia or professorship of physiognostica, or natural history; fifth, a didaxia or professorship of physiosophica, or natural philosophy; sixth, a didaxia or professorship of astronomia, or astronomy; seventh, a didaxia or professorship of chymia, or chemistry; eighth, a didaxia or professorship iatuca, or medical sciences; ninth, a didaxia or professorsnip of œconomia, or economical sciences; tenth, a didaxia or professorship of ethica, or ethical sciences; eleventh a didaxia or professorship of polemitactica, or military sciences; twelfth, a didaxia or professorship of diegetica, or historical sciences; and thirteenth, a didaxia or professorship of ennœica, or intellectual sciences, embracing all the epistemum or sciences relative to the minds of animals, to the human mind, to spiritual existence, to the Deity, and to religion, the didactor or professor of which shall be Vice-President of the institution. The didactors or professors shall be appointed and commissioned by the Governor. There shall be paid from the Treasury of Michigan, in quarterly payments, to the President of the institution, and to each didactor or professor, an annual salary to be from time to time ascertained by law. More than one didaxia or professorship may be conferred upon the same person. The President and didactors, or professors, or a majority of them assembled, shall have power to regulate all the concerns of the institution, to enact laws for that purpose, to sue, to be sued, to acquire, to hold, and to aliene property, real, mixed, and personal, to make, to use, and to alter a seal, to establish colleges, academies, schools, libraries, musæums, athenœums, botanic gardens, laboratories, and other useful literary and scientific institutions, consonant to the laws of the United States of America, and of Michigan, and to appoint officers, instructors, and instructri in, among, and throughout the various counties, cities, towns, townships, and other geographical divisions of Michigan. Their name and style as a corporation shall be "The Catholepistemiad or University of Michigania." To every subordinate instructor and instructrix appointed by the Catholepistemiad or University, there shall be paid from the Treasury of Michigan, in quarterly payments, an annual salary, to be from time to time ascertained by law. The existing public taxes are hereby increased fifteen per cent.; and from the proceeds of the present, and of all future public taxes, fifteen per cent. are appropriated for the benefit of the Catholepistemiad or University. The Treasurer of Michigan shall keep a separate account of the university fund. The Catholepistemiad or University may prepare and draw four successive lotteries, deducting from the prizes in the same fifteen per cent. for the benefit of the institution. The proceeds of the preceding sources of revenue, and of all subsequent, shall be applied, in the first instance, to the acquisition of suitable lands and buildings, and books, libraries, and apparatus, and afterwards to such purposes as shall be, from time to time, by law directed. The *Honorarium* for a course of lectures shall not exceed fifteen dollars; for classical instruction ten dollars a quarter, and for ordinary instruction six dollars a quarter. If the judges of the court of any county, or a majority of them, shall certify that the parent or guardian of any person has not adequate means to defray the expense of suitable instruction, and that the same ought to be a public charge, the Honorarium shall be paid from the Treasury of Michigan. An annual report of the state, concerns, and transactions of the institution, shall be laid before the legislative power for the time being. This law or any part of it may be repealed by the legislative power for the time being. Made, adopted, and published from the laws of seven of the original states, to wit: the states of Connecticut, Massachusetts, New Jersey, New York, Ohio, Pennsylvania, and Virginia, as far as necessary and suitable to the circumstances of Michigan, at Detroit, on Tuesday the twenty-sixth day of August, in the year of our Lord one thousand eight hundred and seventeen.

WILLIAM WOODBRIDGE,
Secretary of Michigan, and at present acting Governor thereof.
A. B. WOODWARD,
Presiding Judge of the Supreme Court of the Territory of Michigan.
JOHN GRIFFIN,
One of the Judges of the Territory of Michigan.

I hereby certify the above and foregoing to be a true copy of the original, now of record in the office of the Secretary of State, on pages 52 and 53 of the Executive Records of Michigan.

R. R. GIBSON,
Deputy Secretary of State.

In this connection, the first annual report of the "University of Michigania" may prove of interest, and it is therefore given herewith. As appears from this report, the University, as established by the Governor and Judges, was not an institution of learning, but a Territorial Board of Education.

THE FIRST ANNUAL REPORT OF THE UNIVERSITY OF MICHIGANIA.

To the Governor and Judges of the Territory of Michigan:

GENTLEMEN,—The report which the law establishing the University requires to be laid before your honorable body cannot, in the present infant state of the institution, furnish any great variety of matter. There is, as yet, but little demand in this Territory for extensive literary establishments. The attention of the University, therefore, has been hitherto occupied in providing for the primary parts of education. In this way they have proceeded as far as their means would permit. From their knowledge of the several districts of the Territory they have deemed it expedient to establish a primary school at the town of Munroe, one at Michilimackinack, and a primary school and a classical academy in the city of Detroit, which they did by statute.

By this an opportunity was given to the inhabitants of those places to apply for the appointment of instructors and for financial aid. No such applications have been made either from Munroe or from Michilimackinack. It is presumed that the inhabitants of the said places have thought themselves unable to afford encouragement to capable instructors and have apprehended, what was the fact, that the University did not possess any disposable funds. In the city of Detroit something more has been done. In the month of October, 1817, several papers were presented at the treasury of the University, purporting to be voluntary subscriptions in aid of the funds of the University. The sums were payable on demand, except where the subscriber expressly extended payments to succeeding years, and except a provision made by a statute of the University, which provides that no more than $50 annually shall be demanded of any subscriber. The whole amount of subscription is about $5,100. Payable on demand, $1,100; the second year, $1,000; the third year, $950; the fourth year, $835; the fifth year, $571; the sixth year, $331; and the seventh, eighth, ninth and tenth years, each $92. Another sum of $940 was also procured from donations, which had been made for the relief of the citizens of Detroit in consequence of the conflagration in 1805, the University assuming the responsibility against all claims on the part of the donors and on the part of the sufferers. As these funds were chiefly derived from the citizens of Detroit, it was deemed just by the University that the said funds should first be applied to their benefit. A building was accordingly ordered to be erected on one of the lots belonging to the University in the city, which was appropriated for that purpose. The expenses of the building have rather exceeded the amount of the first and second years' subscription, together with the aforesaid donations. The plan of these prospective subscriptions has rendered it impossible for the University to make those disbursements which were necessary for the immediate establishment of schools, so that the building has been somewhat retarded and is not yet completed. It was constructed with two stories, the lower of which is appropriated to a primary school, the upper to a classical academy, and are under the control of the trustees of the said institutions respectively. These two are the only institutions that have been organized by the University. In them trustees and instructors have been duly commissioned. The classical academy has been in operation about nine months, and the instructor therein has given abundant evidence of his ability to discharge the duties of that office. The primary school has been in operation three months, is modeled on the Lancasterian plan, and has been conducted with a success equal to the highest expectations of its trustees and visitors. The University have not had it in their power to promote any further the means of education. Yet in their judgment something more ought to be done. Schools are wanting in several districts of the Territory, where the inhabitants are not able to establish them on any respectable footing. They are obliged either to be without instructors, or, which is worse, to employ those who are unqualified. The University are also of opinion that it will be expedient at an early period to found an institution of a superior order, which shall be furnished with a library and philosophical apparatus. Several youth are now advancing in their studies, who, in a short time, will be ready to enter upon a course of collegiate education, and it will be good policy to encourage them to remain in the Territory. It will be economical with regard to pecuniary resources, and will render learning accessible to those in indigent circumstances, and thus the public will be benefited by genius and talents which would otherwise have

died in obscurity. Finally, the University suggest to your honorable body the query, whether the said University of Michigania might not be so organized as to embrace a greater number of persons in the corporation, and thus extend the responsibility, and to have at their disposal such property or resources as would enable them to effect the necessary purposes of education in the Territory.

All which is respectfully submitted.

JOHN MONTEITH,
President of the University of Michigania.

DETROIT, November 16, 1818.

In 1821 some of the provisions of the original act were abrogated; others were elaborated and defined. The policy of the University in matters of religion, for example, was determined to be identical with that of the common schools. The act declared that "persons of every religious denomination were capable of being elected trustees, and no person, president, professor, instructor or pupil was to be refused admittance for his conscientious persuasion in matters of religion." It provided further that the trustees of the University "might from time to time establish such colleges, academies and schools dependent upon the University as they might think proper." It made it the duty of the trustees "to inspect such colleges, academies and schools, to examine into the state and system of education and discipline therein, and to make a yearly report;" "to ordain rules for the government of the institution not inconsistent with the laws of the United States or of the Territory;" and finally, it authorized them to appoint a president and professors; and to remove them at pleasure.

Thus, as early as 1821, the University was placed at the head of the educational system of the State, with comprehensive powers and great responsibilities. The fact is chiefly important as showing the manner in which the rank and position of a university was regarded during the territorial period. It was not until Michigan became a State, in 1836, that these ideas began to assume a concrete form. Among the first acts of the new state government was the appointment of John D. Pierce as Superintendent of Public Instruction, and to him was entrusted the responsible work of preparing not only a system of common schools, but also a plan for a university. In his first report to the Legislature, Mr. Pierce presented the result of his investigation and labors and recommended a system of education for the State.

After discussing at length the lower and intermediate schools, Superintendent Pierce argued with especial ability and fullness that the University ought to be organized upon the broadest basis. He recommended the ultimate establishment of three departments,—one of literature, science and the arts, one of medicine, and one of law. He discussed at length the relations of the institution to the different religious denominations of the State; and he recommended that liberal policy in the appointment of professors which has since been so successfully carried out. Not only were his recommendations marked by a broad and comprehensive wisdom, but his faith in the future of the University must have been most cheering to his associates. "In respect to the assertion," said he, "that state institutions do not and cannot flourish, it may safely be affirmed that the history of the past proves directly the reverse. The oldest and most venerable institutions in our land are emphatically state institutions; they were planted, came up, increased in stature, and attained to the maturity and vigor of manhood under the guidance and patronage of the state. The same is true of nearly all the European universities; they are state institutions, founded, sustained, and directed by the state." The recommendations of this report were adopted and became the basis on which the superstructure of the University has been erected.

The next important step in the history of the University was an effort to emancipate it from the direct control of the Legislature. This effort was not completely successful, but it was so nearly so that the Board of Regents became practically independent. In 1840 a committee, appointed to inquire into the condition of the University, reported such alterations as, in their opinion, were necessary to ensure its full and permanent success. Among other changes they recommended with great earnestness a transfer of all authority over the institution from the Legislature to the Board of Regents. This recommendation they enforced by means of a full exposition of the work to be done, as well as of the difficulty of getting it done by men chosen for the purposes of general legislation. "State institutions," declares the report, "have fallen into the hands of the several legislatures,—fluctuating bodies, chosen with reference to their qualifications for other duties than cherishing literary institutions. When legislatures have legislated directly for colleges, their measures have been as fluctuating as the changing materials of which they are composed. When they have acted through a board of trustees, under the show of giving representation to all, they have appointed men of such discordant and dissimilar views that they never could act in concert, so that while supposed to act for and represent somebody, they, in fact, have not acted and could not act for anybody. * * * What the Legislature should attempt in reference to the University is, in the opinion of the committee, to put the whole subject into the hands of competent men, leaving it with undivided responsibility on their shoulders, and then the Legislature not meddle with it again, except to protect it as guardians, not to destroy it as capricious despots. Repeated legislative interference, known by experience to be the ruin of a cause like this, would soon dishearten every regent who takes an interest or an active part in the duties of his office. The duties of the regents, in their turn, will be mostly to provide the means and apparatus, and the like, and to fill the various faculties with able men, and to throw the undivided responsibility of carrying on the work of education on them. A board of experienced regents can manage the funds of the University better than any legislature; and the faculty can manage the business of education,—the interior of the college,—better than any regents."

The policy thus vigorously advocated was not at once adopted. As we have above seen, the Legislature frequently interfered with the interests of the University by unwise legislation between 1840 and the time of the adoption of the new Constitution in 1850. Interference, however, was not frequent. Practically the control of the institution, even during the period mentioned, was in the hands of the Board of Regents. From the first, also, the interior work of the University was entrusted exclusively to the professors. It is not too much to say that it is largely to this separation of powers, and to this absence of officious interference that very much of the prosperity of the University is to be attributed.

We have already seen in a preceding chapter of these sketches, that the founders and early trustees of the University gave it power to establish and direct subordinate colleges and academies, and as the subject received attention at length in that connection, further mention of it is omitted here.

We now approach a period of very great importance in the history of the University. In 1850 a new state Constitution was adopted, and an important change was made in the organization of the Board of Regents. The modification which had been recommended, as we have above seen, in 1840, was now brought about by means of a constitutional provision. The ten or eleven years that had elapsed since the organization of the board had been enough to con-

vince the law-makers that a change was imperatively demanded. Under the system by which the Regents were appointed by the Governor and Senate, the Board was chiefly made up of politicians rather than of men of superior educational qualifications. The new Constitution struck boldly at the root of the evil. Not only were the Regents henceforth to be elected directly by the people, but they were to possess greatly increased powers.

"The Board of Regents," declared the new Constitution, "shall have general supervision of the University, and the direction and control of all expenditures from the university interest fund." This important clause, it may be remarked, has been interpreted as giving to the Board exemption from the control of the Legislature; and under shelter of it, the Regents have not hesitated to disregard the authority of the Legislature whenever the interests of the University have seemed to demand such action. In this course the Board has been sustained by the Supreme Court of the State. It is probable that no one act in the dealings of the State with the University has conferred a greater benefit upon the institution than the clause above quoted. Before 1851 the University was controlled by good men, it is true, but by men who were appointed because of their political prominence rather than because of their interest in affairs of education, while since that time the Regents have been men selected solely on account of their real or supposed ability and disposition to administer wisely the interests of the University.

No sooner did the new Board of Regents enter upon their duties than the University seemed to enter upon a new career of prosperity. Good plans had been adopted, and a firm foundation had been laid; but as yet the edifice had not begun to rise. Indeed a positive decline in the number of students at the University had taken place. The first catalogue, that of 1843–4, gives us the names of fifty-three students. This number was gradually increased until 1848, when the number had reached eighty-nine. Then for the next five years there was a steady and serious decline. In 1852 the number of students in the department of literature, science, and the arts was only fifty-seven, a smaller number than had been present any year since 1845.

But now an important change took place. The new Constitution required that the Board of Regents elect a president of the University; and this duty they wisely fulfilled by calling to the position Rev. Henry P. Tappan, D. D., of New York. President Tappan brought to the University not only great ability and culture, but also an unusual enthusiasm in the work of higher education. He had studied the educational systems of the different European states, and had acquired a great admiration for the system of Prussia. On coming to the University, therefore, he had but to develop and amplify the policy that had been recommended, and, indeed, adopted by Superintendent Pierce as early as 1837. But it should be said that up to the advent of President Tappan that policy had lain practically dormant. Previous to 1850, when the medical department was inaugurated, nothing but the ordinary classical course had been opened; in a word, there was nothing about the institution on his arrival to remind one that the Prussian system had ever been so much as thought of, much less recommended and decided upon.

In his inaugural address the President reviewed what had been recommended by Superintendent Pierce and others, and announced his purpose to develop the principles that they had adopted. Addressing the Board on the subject, he used these words: "I propose, then, generally, that you follow out the principles you have adopted, and perfect manfully your system of education according to those principles." The great merit, then, of President Tappan's work

for the University was not so much that he advanced new doctrines and proposed new theories, as that he discovered the means of bringing into actual existence and practice what had previously been no more than an ideal.

The interior development of the University was at once begun. The President's policy in this regard was foreshadowed in his inaugural and in his first report. "We see," said he, "a university faculty giving instruction in a college or gymnasium. Our first object will be to perfect this gymnasium. To this end we propose a scientific course parallel to the classical course. There will be comprised in it, besides other branches, civil engineering, astronomy with the use of an observatory, and the application of chemistry to agriculture and the industrial arts generally. The entire course will run through four years, in which the students will be distributed into four classes similarly to the classical course. Students who pursue the full scientific course we shall graduate as Bachelors of Science. In addition to this we shall allow students to pursue special courses, and give them at their departure certificates of their proficiency."

The policy thus promulgated by President Tappan differed in some important particulars from that adopted generally in the older universities. At Harvard, at Yale, and elsewhere, the method pursued has been to keep the classical students separated in a measure from those prosecuting scientific studies. In accordance with this policy the Lawrence and Sheffield schools have each a more or less complete existence independent of the college proper. In Michigan, on the other hand, the policy was adopted of keeping all the students in intimate relations with one another by admitting them as far as possible to the same classes. On the basis of this theory the University has been developed. A scientific course, strictly parallel with the classical course, was at once opened; and a little later, the course in civil engineering was added.

In order that astronomy might be successfully taught, an observatory was needed. Largely through the personal solicitations of the President money was raised, chiefly in Detroit, to supply this deficiency. The Detroit observatory, when ready for use, was recognized as one of the most perfectly equipped in the world, and its subsequent record has more than justified the high anticipations of its founders. In 1856 the central portion of the chemical laboratory was erected; and the demand for instruction became so general that an important enlargement soon became imperatively necessary. Nor in the midst of all this development of scientific studies was the old classical course weakened. On the contrary, it not only continued to enjoy the fostering care of the President and the faculty, but it received an impulse in the appointment of Professors Boise and Frieze to the chairs of Greek and Latin, which to the present day has been to it a perpetual source of strength. The medical school, which had been established just before the appointment of President Tappan, was developed and strengthened. Finally, the law department was opened, and under the inspiring influence of such instructors as Judges Campbell and Cooley, and their fellow professors, it grew in the course of a few years to be the most numerously attended law school in the country.

Another means by which the University was greatly strengthened and developed was the policy adopted by President Tappan in the appointment of professors. From the first he maintained that officers of instruction should be selected solely on account of their ability to instruct. When he was pressed to make appointments on denominational grounds, he not only declined to do so, but maintained that such appointments were wrong in principle and highly injurious in practice. "Egregiously do they mistake," declared he, "the

character and ends of this institution who imagine that because it belongs to no sect or party in particular, it therefore belongs to all sects and parties conjointly and of equal right. It not only does not belong to any sect or party in particular; it belongs to no sect or party at all. The prime object of a seminary of learning is not like that of a church, to inculcate religion or perform its services, but to afford education. A little reflection in connection with some experience of the pressure of denominational interests produced in my own mind, and, I believe, in the minds of the entire board, a settled conviction that any regard to religious denominationalism in the appointment of professors, is both wrong in principle and productive of endless embarrassment. There is no safe guide in the appointment of professors save in the qualifications of the candidate."

Thus by the founding of new departments, by the establishment of new professorships, and by the appointment of men of culture and skill to fill the vacant chairs, as well as by the noble utterances of the President on educational subjects, the work of the University was immensely extended in breadth and in depth. The first catalogue in which President Tappan's name occurs contains a list of fourteen officers and two hundred and twenty-two students; the last one shows that the number had increased during the eleven years of his administration to thirty officers and six hundred and fifty-two students.

In the summer of 1863 President Tappan was succeeded by Rev. Erastus O. Haven, D. D., LL. D. The circumstances attending the change of administration were such as to place serious obstacles in the way of the new President. Predictions were rife that disaster to the University would ensue. These predictions, however, proved groundless. It soon became obvious that the institution was too firmly established to be dependent upon any single person. Although the University, both without and within, was violently agitated, the number of students who applied for admission in the autumn of 1863 was greater than ever before. It was evident that the institution had acquired a momentum which no temporary agitation could check.

Embarrassments of a somewhat serious nature, however, now began to be felt. During the administration of President Tappan the financial resources of the University had been adequate to its most pressing necessities. The salaries of professors in the literary department had been fixed at $1,500, and plans had been adopted on the supposition that these salaries would be permanent. On the outbreak of the war, however, prices advanced so rapidly that the salaries paid were no longer equal to the necessities of the position. But the income of the University was very nearly fixed. The large increase in the number of students called for a similar increase of expenditure both for instruction and for incidentals, while the additional amount received from the small fees of this increased number was altogether inadequate to the increased demand. The University was in fact embarrassed by its prosperity.

Accordingly, in September, 1866, measures were taken by the President and the Board of Regents to bring the financial necessities of the University before the Legislature. The President and several members of the Board repaired to Lansing on the opening of the session and laid the subject before the two houses.

The result of their effort afforded no relief, although it changed the nature of the embarrassment. An act was passed giving to the University a twentieth of a mill tax (equivalent to about $16,000 per annum); but, accompanying the grant was a condition which the Regents felt it impracticable to fulfil. The money was to be paid only on condition that at least one professor of homœopathy should be appointed in the department of medicine.

The excitement at the University in consequence of this act was very intense. Several resignations of professors in the medical department occurred, and it was understood that all the members of the medical faculty wrote their resignations with the determination of proffering them in case the grant should be accepted on the condition imposed.

The medical school had become one of the most prosperous, if indeed it were not without exception the most prosperous in the country, the catalogue for that year showing an attendance of five hundred and twenty-five students. In view of the fact that the school would obviously be broken up by an acceptance of the grant, the Regents voted to postpone the decision of the question for one year.

At the end of twelve months, a period filled with agitation of the subject, the matter was again taken in hand. An attempt was now made to comply with the conditions of the law so far as was necessary to secure the grant, and at the same time to evade them so far as was necessary to save the medical department. For the purpose of accomplishing these two very desirable results, the Board "resolved to organize a school in the department of medicine, to be called the 'Michigan School of Homœopathy,' and to be located at such place other than Ann Arbor as should pledge to the Board of Regents the greatest amount for the building and endowment of said school." For the purpose of carrying out that provision, a professor of theory and practice of homœopathic medicine was appointed, and $3,000 were appropriated to be expended in the organization of the school.

Before anything further was done, however, the matter was carried into court. It is enough, in this connection, to say that the Supreme Bench of the State declared that the course of the Regents was not a compliance with the requirements of the law.

When the Legislature met in January, 1869, the needs of the University again came up for consideration. The course of the Regents in rejecting the grant of the previous session was severely scrutinized; but in the end a majority of the legislators were brought to see that any other disposition of the matter would have imperiled one of the most prosperous departments of the University. Accordingly a new bill was passed giving to the institution the sum accumulated under the previous grant, together with a subsidy of $15,500 a year. Best of all, the grant was free from the obnoxious conditions of the previous act. In view of the turbulent animosities which agitated the practitioners and adherents of the two schools of medicine in all parts of the State, this legislation was scarcely less creditable to the conciliatory and politic wisdom of President Haven, than to the sympathetic generosity of the Legislature itself.

During the six years of President Haven's administration, the different parts of the University were steadily developed. In the department of literature, science, and the arts three additional and distinct courses of study were introduced. The Latin and scientific course was designed to afford a compromise between the strictly classical and the strictly scientific courses. In the place of Greek were substituted French and German, and in the place of a portion of the higher mathematics were given somewhat more advanced studies in English. A course in mining engineering was also offered, but as the appliances for technical illustration were meagre, no very marked advancement could be made. The course in pharmacy, designed for the education of apothecaries and druggists, on the contrary, attracted to it so large a number of

students that the already spacious accommodations of the chemical laboratory had to be considerably increased.

In 1869 President Haven withdrew from the University, leaving behind him every token of a prosperous administration. Every department of the institution had been extended in breadth and in depth; and in the number of students in attendance had increased to somewhat more than eleven hundred.

It was two years after the resignation of President Haven before President J. B. Angell was inaugurated as his successor. Meanwhile the affairs of the University were ably administered by Prof. H. S. Frieze as acting President.

In the course of Acting-President Frieze's term of office several measures of very great importance were adopted. The most noteworthy of these was unquestionably the opening of the University to women. The question of the admission of women to the privileges of the institution had often been agitated. In 1858 the subject was brought before the Board of Regents by the petition of a number of young ladies asking for admission to the University. The question was carefully considered by the President and the Board. On the 8th of September of that year a very elaborate and able report adverse to the petition was adopted by the Regents. The next step in the history of the movement was taken in the Legislature. In the winter of 1867 it was resolved "that it is the deliberate opinion of this Legislature that the high objects for which the University of Michigan was organized will never be fully attained until women are admitted to all its rights and privileges."

On the basis of this declaration the Board of Regents at their meeting in April, 1867, instructed the executive committee "to consider this subject, and at some future time report whether the regulations relating to the admission of students to the different departments of the University, and to the conferring of degrees should not be so construed as not to exclude women, residing in the State of Michigan, from the right of matriculation, and to become candidates for graduation upon the same conditions and with the same requirements as are demanded of men."

In September of the same year, while the subject was still before the committee, President Haven discussed the matter at some length in his annual report. The embarrassments that would arise in case of a compliance with the declared wish of the Legislature were fully considered. The conclusion reached by the President was expressed in the declaration that "it is too late now to make this change without a revolution that should not be risked except under a necessity that cannot otherwise be met. And if insisted upon," continued the President, "suitable appropriations of money to meet the expense should be made. The establishment of a state college for young ladies would reasonably and successfully meet the demand."

One year later, however, the President declared that his views on the question had undergone some modification. In his report of September, 1868, he expressed the belief that, as the deliberate opinion of the Legislature appeared to be the opinion of the people of the State, the University, belonging to the State, ought to regard that opinion. "The more I consider the subject," declares the report, "and the more carefully I study the results of the education of both sexes in the same schools, the more inclined am I to the belief that the best method for Michigan would be to make provision for the instruction of women at the University, on the same conditions as men. I have come to this conclusion slowly. A few objections have sometimes seemed to me strong, but the most of what is urged against it is fanciful, and partakes of the nature of the thoughtless opposition made to what is new."

In April, 1869, Regent Willard, who had from the first ardently advocated the measure, presented to the Board the following resolution:

"*Resolved*, That in the opinion of this Board no rule exists in any of the university statutes which excludes women from admission to the University."

This resolution was laid upon the table by a vote of five to three.

But it was becoming more and more apparent that the demands of the public could not long be resisted. The necessities of the University were becoming more and more imperative, and it seemed doubtful whether the Legislature would grant the necessary aid unless women were admitted to a share of its benefits. Accordingly, in January, 1870, the subject was again brought before the Board of Regents by Regent Willard; and the question was finally settled by the adoption of the following resolution:

"*Resolved*, That the Board of Regents recognize the right of every resident of Michigan to the enjoyment of the privileges afforded by the university, and no rule exists in any of the university statutes for the exclusion of any person from the University who possesses the requisite literary and moral qualifications."

From what has been given in the above statement of facts it will be seen that the resolution, though unpretending and simply expository in its nature, embodied in itself nothing less than a measure which had received the most careful attention, and which was fraught with the most far-reaching results.

The admission of women to the University made further appropriation by the Legislature imperatively necessary. It was at once determined that in the department of medicine women should not be taught in the same classes as men, and consequently that the lectures would have to be duplicated. This fact not only made an increase of salary to the professors in the medical department necessary, but it also called for increased accommodations in the way of buildings and apparatus. Such increased facilities, moreover, were especially imperative in the literary department.

Accordingly, in January, 1871, the wants of the University were brought before the State Legislature. The representation was not in vain. Although the homœopathic question was still unsettled, and although in consequence of this fact some bitterness towards the course of the Regents was manifested, yet it was obvious that the Legislature as a whole were proud of the University, and were determined to support it. An important appropriation was made in response to the efforts of the university authorities. This was an independent grant of $75,000 for the purpose of affording increased accommodations to the literary department, a grant from which the building known as University Hall was chiefly erected. This legislation was important not only as affording assistance to the University, but as the inauguration of a policy which, it was hoped, would afford it permanent and adequate support.

Another measure of great importance inaugurated in the course of Professor Frieze's administration was the formation of an official connection between the University and the high schools of the State, to which attention has already been given in a preceding chapter of these sketches.

It is worthy of mention that it was during the administration of Prof. Frieze that the first important addition by private liberality was made to the university library. It became known that the library of the late Prof. Rau of the University of Heidelberg was for sale; and the Acting-president of the University at once set about securing the means of purchasing it. His efforts were successful. Philo Parsons, Esq., of Detroit not only bought the library for the University, but also volunteered to fill out important sets of books and periodicals as yet incomplete. Thus the university library was enriched by an

addition of about 4,000 volumes and 5,000 pamphlets devoted to the science of government, political economy, and cognate subjects.

Soon after the resignation of Dr. Haven, Dr. J. B. Angell, of the University of Vermont, had been invited to the vacant presidency. This invitation he had declined. Nearly two years later, however, it was renewed and accepted. In June, 1871, therefore, President Angell was inaugurated, and in the following September he entered upon the duties of his office.

From what has been noted it will be observed that President Angell entered upon his executive duties just after several very important innovations had been determined upon. The admission of women to all the departments of the University, and the admission of students from the high schools of the State to the literary department, without examination, were changes of too great moment to be entered upon without considerable solicitude. Many prophesied only evil as the sure result of these innovations, while even those who were friendly to the changes feared that great dangers might arise. But President Angell ably assumed the responsibilities devolved upon him, and all anticipated evils have been averted. In his report for 1879, President Angell, speaking of the results of the admission of women to the University, says "After our nine years' experience in coëducation we have become so accustomed to see women take up any kind of university work, carry it on successfully, graduate in good health, cause no embarrassment in the administration of the institution, and awaken no special solicitude in the minds of their friends or of their teachers, that many of the theoretical discussions of coëducation by those who have not had opportunities to examine it carefully, read strangely to us here on the ground." In reference to the subject of the admission of students from the high schools without examination, Acting-president Frieze, who had again assumed the administration of the affairs of the University, owing to the temporary absence of President Angell as minister to China, in his report for 1880, says: "There are now sixteen of the most flourishing and important high schools of the State holding this relation to the University; and no one can look into the condition of these schools without feeling satisfied that this connection has had the effect both to animate their students to more earnest effort, and to encourage and strengthen the teachers, while it has brought about a more perfect unity of plan and method in the schools of the State in general. In short, it gives to our schools, otherwise isolated, a bond of union and a centre of life. We are convinced, as the result of an experiment of ten years, that this coöperative plan, especially if entered into by the few remaining schools, and thus perfected, will give a character of consistency, solidity, strength, and efficiency to the educational work of the State, which will leave nothing further to be desired but the uninterrupted operation and movement of the system."

The appropriations made by the Legislature in the sessions of 1875, 1877, and 1879 should also be mentioned as a part of the work thus far accomplished during the administration of President Angell. The homœopathic question, after numerous and most trying vicissitudes, has been settled by appropriations for the establishment of a homœopathic college as a distinct branch of the University, while another grant has provided for a school of dentistry. By means of other generous provisions hospitals, where patients are treated by the medical professors free, in consideration of the benefit to students of medicine, afforded by opportunities of studying courses of treatment, have been established; a museum building has been erected, many permanent improve-

ments of the buildings and grounds have been effected, and the university authorities have been enabled to enlarge and multiply the courses of study. Whatever may be thought of the early policy of the Legislature towards the University, the liberality manifested in later years affords most gratifying evidence that the State is disposed to bestow upon the institution all needed support.

The history of the University of Michigan has been one of alternating difficulties and triumphs. It could hardly be expected that an institution of such magnitude, belonging to a democratic people and controlled by state authorities should escape controversies. In its earlier years, when the success of the University, if not, indeed, its existence, was problematical, there appears to have been a general harmony in efforts to foster and develop it. As it grew older and stronger, however, opinions as to its management began at times to clash. But the very strength which gave occasion for such controversy carried it safely through. Even a conflict between the Regents and the Legislature cannot shake its foundations. While the institution is governed by the Regents, back of them stands the Legislature, and back of the Legislature, the *people;* and whether the question be one of admitting certain schools of medicine, or of the election or dismission of a president or a professor, or of admitting female students, the *people* will find a way to decide it, and they will also see to it that the threats and croakings of disaffected parties shall work no lasting injury to the institution that is at once their pride and hope.

Since its halls were first opened the University has graduated 6,166 students. It now employs fifty-two instructors, in addition to a number of assistants and officers. The estimated value of its grounds, buildings, and other property is $681,442.00, while its library contains nearly 37,000 volumes and about 10,000 pamphlets.

The following table will show the total number of degrees conferred in the several departments from the organization of the University to the present:

Department of Literature, Science, and the Arts:		
Bachelors of Arts	988	
Bachelors of Science	238	
Bachelors of Philosophy	138	
Civil Engineers	160	
Mining Engineers	21	
Bachelors of Letters	3	
Honorary Ph. D., on an alumnus	1	
Honorary LL. D., on alumni	3	
Doctor of Philosophy (on examination)	5	
Honorary degrees to persons not alumni	23	
Resident graduates of other colleges who have received degrees	15	
Masters' degrees (M. A., M. S., and M. Ph.)	515	
		2,110
Department of Medicine:		
Doctors of Medicine		1,796
Department of Law:		
Bachelors of Laws		2,400
School of Pharmacy:		
Pharmaceutical Chemists		240
Dental College:		
Doctors of Dental Surgery		82
Homœopathic Medical College:		
Doctors of Homœopathic Medicine		76
Total of degrees conferred		6,704

The following table gives the number of students in attendance from the date of opening to the present time:

YEAR.	Number of Students Enrolled.						
	Department of Science, Literature and the Arts.	Department of Medicine.	Department of Law.	Homœopathic Medical College.	College of Dentistry.	School of Pharmacy.	Total.
1844	53	.....	.....	.....	.....	.....	53
1845	55	.....	.....	.....	.....	.....	55
1846	70	.....	.....	.....	.....	.....	70
1847	72	.....	.....	.....	.....	.....	72
1848	89	.....	.....	.....	.....	.....	89
1849	77	.....	.....	.....	.....	.....	77
1850	72	.....	.....	.....	.....	.....	72
1851	64	51	.....	.....	.....	.....	159
1852	57	159	.....	.....	.....	.....	216
1853	60	162	.....	.....	.....	.....	222
1854	93	151	.....	.....	.....	.....	244
1855	155	133	.....	.....	.....	.....	288
1856	223	152	.....	.....	.....	.....	375
1857	285	167	.....	.....	.....	.....	452
1858	276	137	.....	.....	.....	.....	413
1859	287	143	.....	.....	.....	.....	430
1860	265	164	90	.....	.....	.....	519
1861	273	242	159	.....	.....	.....	674
1862	270	216	119	.....	.....	.....	605
1863	266	252	134	.....	.....	.....	652
1864	295	340	221	.....	.....	.....	856
1865	279	416	260	.....	.....	.....	955
1866	354	467	385	.....	.....	.....	1,206
1867	335	525	395	.....	.....	.....	1,255
1868	418	418	387	.....	.....	.....	1,223
1869	422	358	342	.....	.....	.....	1,122
1870	477	340	309	.....	.....	.....	1,126
1871	488	315	307	.....	.....	.....	1,110
1872	509	350	348	.....	.....	.....	1,207
1873	476	357	331	.....	.....	.....	1,164
1874	484	314	314	.....	.....	.....	1,112
1875	476	370	345	.....	.....	.....	1,191
1876	452	312	321	24	20	.....	1,129
1877	369	285	309	51	33	64	1,111
1878	367	297	384	73	43	69	1,233
1879	445	329	406	63	62	71	1,376
1880	448	353	395	70	83	81	1,430

II. THE STATE AGRICULTURAL COLLEGE.

The first steps towards the establishment of an agricultural school in Michigan were taken in 1850, in a provision of the Constitution which required the Legislature, as soon as practicable, to establish such an institution. The question of practicability was one upon which opinions probably differed, as nothing was done in pursuance of the constitutional provision mentioned until 1853, when a bill to establish an agricultural college passed the Senate by a vote of seventeen to fourteen, but was lost in the House by a vote of thirty-six to twenty-four. Here the matter rested until 1855, when the Legislature decided to establish the school, by a vote of twenty-four to five in the Senate, and of fifty-two to thirteen in the House. By the provisions of this act the school was to be located within ten miles of the State Capitol, and twenty-two sections of salt-spring lands were appropriated for purchasing a farm and putting the school in operation. The school was also placed under the management of the State Board of Education.

The law was approved February 12th, by Governor Bingham, who from the first had been a warm and efficient friend of the enterprise, and in June the executive committee of the State Agricultural Society, the agents designated by law for that purpose, selected and recommended the purchase of a farm of six hundred and twenty-three and fifty-six one-hundredths acres, situated upon both sides of Cedar river, three and one-half miles due east from the Capitol; and in pursuance of the law, the State Board of Education approved of the selection, and concluded the purchase of the same for $9,353.55, being at the rate of fifteen dollars per acre. This was considered by all acquainted with the circumstances to be a reasonable price. It was thought very desirable to procure, in addition to the above, an adjoining tract of fifty-three and one-one-hundredth acres, upon which some improvements had been made; but which the Board could not buy—fifteen dollars per acre being as high as they were allowed to pay by the act authorizing the purchase. This was, however, afterwards procured, and $1,059.92 paid therefor, agreeable to a joint resolution of the Legislature, making the whole amount 676.57 acres, and a total expense of $10,413.47.

In 1856, a large boarding-house, and the west wing of the college buildings, one hundred by fifty feet, and four stories high, including a high basement, were erected, and were nearly ready for use when the Legislature convened in January, 1857.

The aggregate minimum price of the twenty-two sections of salt spring lands was $56,320; and the Legislature of 1857 further appropriated $40,000 from the Treasury, to meet the wants of the institution, in completing the necessary improvements, furnishing apparatus, etc., and sustaining the current expenses of the school in operation for the years 1857 and 1858.

The farm was new, and a heavy expense was required to bring a portion of it under immediate cultivation. Barns, etc., were to be built, with dwellings for the officers (for until this was done they must reside at Lansing); and about the time the school was to be opened, provisions, and almost everything required in commencing farm operations rose to unprecedented high prices. The contractors who erected the college buildings had performed some of their work insufficiently, and $1,546.13 had been deducted from their pay, in a set-

tlement with the Board of Education; but the cost of repairing their deficiencies was found to be much more than was anticipated, involving additional expense.

The State Board of Education elected Hon. Joseph R. Williams, President, and Messrs. J. C. Holmes, Calvin Tracy, Robert D. Weeks, and Rev. L. R. Fiske, professors of the institution, which was opened by appropriate exercises and with sixty-one students, on the 13th of May, 1857. Thus was organized and opened the pioneer agricultural college in the United States, and though without any precedent adaptable to this country, it has served to a great extent as the model which most of the other states have followed.

The State Board of Education had the supervision of the College until 1861. Up to that time the institution struggled for existence against the violent opposition and prejudice that existed in the minds of many people, and more especially on the part of the farming population. At each succeeding session of the Legislature persistent efforts were made to prevent appropriations, though such opposition was usually overcome. In 1861, in accordance with the wish of the State Board of Education, the supervision was transferred to the State Board of Agriculture, and the College has since been constantly growing in the regard of all classes.

The Agricultural College was organized without any endowment fund, as the State had no unappropriated lands from the sale of which to create such a fund. There was lying within the borders of the State a large area of government lands, and with a view to the establishment of an agricultural school the Legislature had already, in 1850, asked Congress for a grant of 350,000 acres for the endowment of such a school; but the request was without effect. In 1857, the State Board of Education and the faculty of the College united in a petition to Congress for a grant of land for the purpose of endowment, which was endorsed by the Legislature in 1858. During this year a bill was passed by Congress granting 25,000 acres of land for each member of Congress to the several States for the support of agricultural schools, but it was vetoed by President Buchanan. In 1862, a bill was introduced in the United States Senate, passed by both houses, and approved by President Lincoln, granting 30,000 acres for each member of Congress, to the several states, for the endowment of agricultural schools. This gave to Michigan 240,000 acres. In 1863 the Legislature placed the disposal of these lands under the control of a board, consisting of the Governor and other state officers, who were to select the lands and sell them on the same terms as the primary school lands are sold, and at not less than $2.50 per acre. The patents to these lands were not obtained till 1868, when the Land Grant Board raised the price to $5.00 per acre. Only 520 acres were sold the first year. In 1869, the Legislature fixed the minimum price at $3.00, and lands valuable for timber, $5.00, and 14,480 acres were disposed of the same year. The act of 1863 provided that the moneys received for the lands should be invested in stocks paying not less than five per cent.; but in 1871 it was enacted that the moneys received should go into the State Treasury on the same terms as other educational "trust funds," upon which the College should receive seven per cent. annually.

Of the 240,000 acres to which the State was entitled, 235,673 acres have been patented to the State, and of these there were remaining unsold, September 30, 1880, 151,345.45 acres. The state of the fund at the same date, as shown by the official record, was as follows:

In the hands of the State	$153,137 70
Due from purchasers	128,311 82
Total agricultural college fund	$281,449 52
Income	17,954 82

The following table has been prepared to show the amount of moneys received each year by the Agricultural College, from income on permanent funds, legislative appropriations, and other sources.

YEAR.	Income from Permanent Funds.	Legislative Appropriations.	Receipts from Other Sources.	Total Resources.
1855		$10,358 95		$10,358 95
1856		34,181 50		34,181 50
1857		48,619 01	$2,127 28	50,746 29
1858		3,158 85	2,935 00	6,093 85
1859		17,676 45	2,982 67	20,659 12
1860		13,219 43	449 97	13,669 40
1861		9,597 50	1,768 92	11,366 42
1862		13,506 62	1,852 10	15,358 72
1863		8,000 00	1,518 32	9,518 32
1864		10,000 00	1,582 51	11,582 51
1865		15,000 00	6,626 94	21,626 94
1866		15,000 00	7,216 04	22,216 04
1867		20,000 00	14,569 35	34,569 35
1868		20,000 00	8,810 85	28,810 85
1869		45,000 00	25,752 17	70,752 17
1870	$2,779 89	25,000 00	11,680 90	39,460 79
1871	2,976 00	28,750 00	15,829 17	47,555 17
1872	6,774 47	18,250 00	8,495 96	33,520 43
1873	12,238 48	25,096 00	11,402 69	48,737 17
1874	11,896 00	38,562 87	17,693 31	68,152 18
1875	14,656 00	18,600 11	17,716 03	50,972 14
1876	18,817 89	13,857 52	21,439 74	54,115 15
1877	15,172 86	23,978 18	20,783 54	59,934 58
1878	13,320 61	25,828 42	22,242 55	61,391 58
1879	16,602 02	7,070 79	21,200 20	44,873 01
1880	17,799 15	22,455 15	22,708 56	62,962 86
Totals	$133,033 37	$530,767 35	$269,384 77	$933,185 49

As has already been noted Joseph R. Williams was the first President of the College. No service more pure and devoted could have been rendered than was given to the interests of the institution by its first President; but Mr. Williams had been in political life, and the College was made, at once, the object of bitter party feeling. After two years of service Mr. Williams resigned, and the College remained without a President until 1863, when Rev. Theophilus C. Abbot was chosen to the office, in which he has labored wisely and efficiently ever since.

The following table has been compiled to show the number of students in attendance, as well as the number of graduates, each year from the opening of the College till the present:

YEAR.	No. of Students.	No. of Graduates.	YEAR.	No. of Students.	No. of Graduates.
1857	61		1869	79	10
1858	101		1870	129	12
1859	105		1871	141	12
1860	51		1872	131	5
1861	65	7	1873	143	15
1862	74	5	1874	121	21
1863	60		1875	156	15
1864	62	5	1876	164	17
1865	88		1877	154	15
1866	108	2	1878	239	30
1867	137	5	1879	232	25
1868	82	10	1880	221	33
Total number of graduates					244

Among the several objects which the Agricultural College proposes to accomplish, the following, as given in the last annual calendar, are worthy of notice:

1st. To impart a knowledge of science and its application to the arts of life. Those sciences especially which relate to agriculture and kindred arts, such as chemistry, botany, zoölogy, and animal physiology, are prosecuted to a much greater extent than in institutions where the study of their practical applications is not pursued. The instruction given in the lecture room is illustrated and enforced by the actual and prolonged study of plants and animals, and the various practices and experiments of the farm and garden. Students are taught to distinguish clearly between those principles and settled rules of agriculture in accordance with which they may safely proceed, and those theories or practices which are either exploded, or are as yet the proper objects of experiment and discussion only.

2d. To afford to its students the benefits of daily manual labor. Most of the labor is paid for, and lessens the expenses of the student. It is in part educational,—varied for the illustration of the principles of science. The preservation of health, and the cultivation of a taste for agricultural pursuits, are two other important objects. Four years of study, without labor, wholly removed from sympathy with the laboring world, during the period of life when habits and tastes are rapidly formed, will almost inevitably produce disinclination, if not inability, to perform the work and duties of the farm. To accomplish the objects of the institution, it is evident that the student must not, in acquiring a scientific education, lose either the ability or the disposition to labor on the farm. If the farmers, then, are to be educated, they must be educated on the farm itself; and it is due to this large class of our population that facilities for improvement second to none other in the State be afforded them. It is believed that the three hours' work that every student is required to perform on the farm or in the garden, besides serving to render him familiar with the use of implements and the principles of agriculture, is sufficient also to preserve habits of manual labor, and to foster a taste for agricultural pursuits. It has been found in the past sufficient to keep the students interested in every department of farm and horticultural work; and the daily labor of each one, being performed at one time, does not occupy him longer than is requisite for preserving health and a robust constitution.

3d. To prosecute experiments for the promotion of agriculture and horticulture. These arts are the creatures of experiment. Very few farmers possess facilities for carrying on experiments accurately and to definite results. From a lack of acquaintance with the laws of nature, experiments generally, unless guided by scientific men, are comparatively valueless for the determination of vexed questions of practice and the establishment of general principles. An extensive laboratory and other means at hand enable the institution to enter on a series of experiments to be prosecuted systematically and continuously from year to year.

4th. To afford instruction (when adequate means are secured) in such other courses of study as the organic law of the College, and the act of Congress donating lands for agricultural colleges, contemplate, especially, in the applications of science to military pursuits and the various arts of life. The College at present teaches surveying, leveling, laying out of grounds, mechanics as applied to implements, building, stock breeding, agricultural chemistry, horticulture, and such practical applications of science as are specially useful to the farmer.

5th. To afford the means of a general education to the farming class. The labor system preserves the student's health, and the habits and love of wholesome work. The professional part of the course gives him an insight into the nature of the objects and forces with which he has to deal. Added to this are the branches of study which help to make an intelligent and useful citizen; which cultivate his taste, and enable him to give expression to his knowledge and opinions.

The buildings, at present, consist of the following:

1st. College hall, 50 by 100 feet, of three stories and basement. It is occupied by the garden shop, office, and tools in the basement; the chapel and library on the first floor; class-rooms and offices of the president and secretary on the second floor; and museums, zoölogical laboratory, and class-rooms for zoölogy and botany on the third floor. The library, museum, zoölogical rooms, president's and secretary's offices, are shortly to be removed to a new building, now in course of erection.

2d. Williams hall, in largest dimensions, 116 by 116 feet, of three stories and basement, with a Mansard roof and a tower. It contains the dining-hall, kitchen, laundry, etc., in the basement; the steward's rooms and public parlor on the first floor; rooms for about 80 students on the second and third floors, and society rooms in the Mansard.

3d. Wells hall, 50 by 150 feet, has two society rooms, with a drill-room and armory in the basement; the three stories above accommodate 128 students.

4th. Chemical laboratory, 50 by 150 feet, of one story and basement. The basement contains the furnace-room, store-room, dressing-room, and rooms for higher chemistry, and on the first floor are the lecture room, analytical room, private laboratory and study of the professor, and the apparatus room. An addition to the chemical laboratory is now building.

5th. Botanical laboratory, 71 by 52 feet, of two stories. On the first floor are the lecture room and study, and on the second the drying room and museum.

6th. Greenhouse, with aggregate room for plants, 25 by 183 feet, with gardener's rooms, rose room, and potting room attached, 26 by 42 feet.

7th. Dwelling houses for the president, professors, secretary, and herdsman, and the farm-house.

8th. In addition there are cattle, horse and sheep barns, a piggery, garden barn, carpenter shop, tool sheds, and an apiary.

The means of illustration possessed by the College are quite ample and complete, embracing among them the general museum, which contains preserved specimens of mammals and birds of the State, reptiles and batrachians, large collection of shells, native and exotic; collection of invertebrates from the Smithsonian Institution; three collections of insects,—a faunal, a scientific and an economic; radiates, manikin, skeletons of man and of the lower animals; alcoholic and microscopic preparations of animal organs and tissues; fossil-from all the groups of rocks; rock specimens illustrating the divisions in lithologic geology; and a small but growing collection in ethnography. A museum of mechanical inventions, containing one thousand models from the United States patent office, and other models and charts, illustrating most of the industrial arts, especially agriculture, manufactures, architecture and engineering, may also be mentioned in this connection, besides the library and reading room, which contains over 6,000 volumes and 100 periodicals; an astronomical observatory, and necessary apparatus for illustration in mechanics, astronomy, and engineering.

The estimated value of grounds, buildings, apparatus, and other property belonging to the College aggregates over $274,000, according to the report of President Abbot to the Superintendent of Public Instruction for the year 1880.

Under the auspices of the State Board of Agriculture, the faculty of the institution inaugurated, in January, 1876, a system of farmers' institutes, which are held during the winter season at various places in the State. At each of these leading agriculturists are invited to present papers, and take part in the discussions and proceedings, full reports of which are published in the annual reports of the State Board of Agriculture. These institutes have added greatly to the usefulness and growing popularity of the College, besides doing much toward disseminating improved ideas of practical agriculture and enforcing the value of its scientific study.

III. DENOMINATIONAL COLLEGES.

Among the important questions which agitated the minds of those connected with the management of public affairs in the earlier days of the State's history was one relating to the policy of granting charters to private colleges. Many thought that at that time, when the State was bending all its energies to build up the University, such institutions should be repressed, rather than encouraged, lest by their rivalry they should retard the progress of the University. This question, in the view of Superintendent Pierce, involved the highest considerations of sound public policy as affecting the State in all time to come. In his report for 1838 he says:

> When this decision is finally made it will not require the inspiration of a prophet to determine whether the State shall eventually assume the first rank in the republic of letters, by founding and rearing up an institution of noble stature and just proportions, worthy alike of the State and of learning, and equally worthy the name of university, or whether the State shall ultimately sink to a low level in the world of knowledge, having institutions under the imposing name of colleges, scattered through the length and breadth of the land, without funds, without cabinets, without apparatus, without libraries, without talents, without character and without the ability of ever maintaining them. If one is granted, others must be, and there is no

limit. If one village obtains a charter for a college, all others must have the same favor. In proportion as they increase in number, just in that proportion will be their decrease of power to be useful.

Happily, although the Superintendent's views did not prevail, the evils he foreboded have not followed. The University has grown to a grandeur that even he did not anticipate so early, and the colleges have not been unduly multiplied.

The question which the Superintendent had thus presented, was finally precipitated upon the Legislature by a petition presented by Hon. Jacob M. Howard to the House of Representatives, January 19, 1838, "to incorporate the Trustees of Michigan College." The petition was referred to a committee of which Mr. Howard was chairman, who made a majority report adverse to the views of Mr. Pierce and favorable to the college for whose incorporation he introduced a bill. The following extracts from Mr. Howard's report embrace substantially the views of the committee:

The committee cannot appreciate the force of the objection that by granting the franchises asked for, we encourage others to make like requests. We are of opinion that in this, as well as in other matters coming before the Legislature, it is to be governed by a sound discretion, neither granting nor withholding, without sufficient reason, and keeping constantly in view the general good of community.

They deem it the duty of the Legislature not only to prevent all impediments, but to afford facilities to the progress of general education; to speak in words of encouragement rather than of restraint to those who volunteer to aid it, and not from an overweening fondness for one particular institution, or one particular system, place all others under the ban of power.

To the fear that "the establishment of this or other institutions of the kind would distract public attention and divert patronage from the University," the committee replied:

An institution, under the immediate supervision and control of the government, with an endowment of one million dollars, and all the attendant patronage, cannot be prostrated or impeded in its progress by any voluntary association, founded upon individual munificence. The true secret of the success of every such institution is found in the enterprise, learning, and capacity of those at its head; and where these are wanting, the interests of education, like those of commerce and other branches of business, will assuredly decline.

It is also urged that by confining the power of granting diplomas to the State University, and withholding its exercise from all other institutions, the State ensures to that University at all times a number of students corresponding to its high literary claims and the wealth of its endowment. We are at a loss to discover the propriety of this restrictive and exclusive principle. * * * It is certainly at war with the well known freedom of American institutions and American character. * * * We claim that the ancient and time honored system of New England, now extending over almost the whole country, is more in accordance with the genius of the American people than any known system of foreign nations. We are not to suppose that the settled feelings, habits, and opinions of a people can be safely disregarded by their rulers, nor that they can be made to bend and quadrate to any and every innovation which those in authority may dignify with the name of improvements. Still less can freemen be compelled to countenance a monopoly of those benefits which they have been taught to regard as the gift of God. * * * In our own community there exists every variety of religious and political opinion, and so strong are men's attachments to their own particular creeds that any legislative attempt to change or modify them by the course of instruction or otherwise; any system which seeks to make all coalesce into one set of opinions, or to inculcate indifference to all, or which erects a barrier to even the caprices of men, must necessarily prove odious and unavailing. Whatever may be the theories of philosophers and speculatists, among the mass of mankind religion is not supposed to exist without creed, and to use the language of another, "he is a rash man, indeed, and little conversant with human nature, and especially has he a very erroneous estimate of the character of the people of this country, who supposes that a feeling of this kind is either to be trifled with or despised; it will assuredly cause itself to be respected."

One obvious effect of the system recommended will be to drive from the State every young man wishing to obtain a degree, but unwilling from whatever cause to prosecute his studies in the University. The majority of the committee deem it unjust to individuals and the State to confer on the State University a monopoly of college honors. It is the right of every parent and guardian, and one which we may be assured will be insisted on, to educate his child or ward in his own way; and it is furthermore the right of the student himself that the road to literary honors should be opened to him by his own state, in a manner accordant with his own feelings and principles; and it is the correspondent duty of the state to cherish and encourage all her sons in the way to distinction and usefulness, in order that she may reap her just share of the glory of their achievements. It is made the duty of the Legislature "to encourage by all suitable means the promotion of intellectual and scientific improvements." It is conceived that the policy proposed is in conflict with the spirit of this provision, inasmuch as it in a manner disfranchises a large portion of the community. We predict that if it be adopted as the governing rule of the Legislature, it will drive from us a large number of young men seeking a liberal education, and the usual honors by which it is and ever ought to be distinguished will engender hatred rather than create respect for the state institution, and ultimately leave it deserted by all but its immediate government patrons—a place where the idle and curious may find gratification, but devoid of that active, vital energy which is ever kept awake by peaceful and salutary competition.

The minority of the committee made a report strongly sustaining the doctrines of the Superintendent; but the opinions of the majority prevailed, and in 1839 the Legislature decided the question by granting the charter.

In 1845 the question of granting to incorporated literary institutions the power of conferring degrees was presented to the consideration of the Legislature, and the committee to whom the matter was referred made the following report in relation thereto:

The committee on education have had under consideration a petition of the trustees of the Kalamazoo Literary Institute, praying that their charter may be so amended as to give them the power of conferring the honors and degrees usually conferred by collegiate institutions on such students as may have completed the ordinary course of studies in that institution, and have instructed me to report, that, in the opinion of your committee, the usefulness and reputation of a seminary of learning depend on the excellence of the system of instruction adopted and pursued therein, and not on any power possessed by the managers thereof of conferring empty degrees and diplomas. If a young man has undergone a mental discipline which has aroused his intellect, fortified his virtue, stored his memory with useful knowledge, and induced habits of application and thought, he will enter the world with a certainty of attaining, in due time, to a respectable position among his fellow men, and this without the aid of a parchment certificate, and an idle "A. B." or "A. M." attached to his name. The institution where such a discipline prevails will not depend for patronage and success on its power of conferring literary degrees and honors, but on the recognized excellence of its system. When the trustees of an institution of learning ask for, and urge the necessity of receiving, the power of conferring degrees, "to enable them to adapt the institution to the present time and circumstances, to carry out its original design, and to promote the interests of education generally," a suspicion is engendered that the trustees are laboring under a slight misapprehension of the true objects and aims of, and the internal economy adapted to, such an institution. Your committee are of opinion that this power should be exercised by those institutions alone, which, by the possession and control of ample means, the employment of distinguished and well known professors, and the enjoyment of a wide spread and deserved reputation, will afford a guarantee against the abuse of the power. Experience teaches us that colleges in some of the states have been so reckless and indiscreet in conferring honors on unworthy subjects, that it is not uncommon to encounter an A. B. or an A. M. incapable of construing and translating his own diploma. Though your committee apprehend no such foolish consequences from granting the prayer of this petition, yet they think that great caution should be used, lest the standard of education be lowered. Former legislatures have been laudably careful in bestowing this power on chartered schools, and the only two instances in which it has been extended are so guarded and restricted that the clause is little better than a dead letter in the acts of incorporation. But your committee doubt the policy of conferring these degrees at all. They are inconsistent with

the spirit of our institutions, and a vestige of the aristocratical distinctions of monarchical Europe. The hope of attaining them is a motive addressed not to the reason nor to the generous emulation of youth, but merely to their vanity. Intellect, morality and knowledge confer a patent upon their possessor universally recognized and respected—a patent which schools can neither give nor take away. And it is a remarkable fact in our Nation's annals, that while a majority of those great and good men, whose names are identified with the national glory, were ardent and untiring devotees at the shrine of knowledge, still they never attained the distinction of an academical degree.

Notwithstanding the fears that had been expressed, the success of the University became more and more assured, and this fact tended to lessen the opposition to the establishment of denominational or private colleges. In consequence of this, we find that previous to the adoption of the Constitution of 1850, several charters had been granted to such institutions. In 1855, however, the question of incorporating colleges again arose before the Legislature. The new Constitution of the State having forbidden the granting of special charters for any private corporation whatever, and a project being on foot to establish a college at Hillsdale, a general law for the incorporation of colleges was sought. On the 12th day of January, Hon. Austin Blair presented, in the Senate, a "bill for the incorporation of colleges, and other institutions of learning." An earnest discussion of this bill ensued, and an effort was made to restrict the power to confer degrees to the State University, which would, in effect, have banished all other colleges from the State. No record was preserved of the debates, but the question was again decided in favor of colleges, a general law for their incorporation passing the Senate by a unanimous vote, and the House of Representatives by a vote of fifty-four for it to fourteen against it.

Shortly after the general law for the incorporation of colleges was enacted, an effort was made to secure an appropriation of $2,000 per annum for such colleges as should establish a normal department, and do a certain amount of work in the training of teachers to the satisfaction of the State Board of Education. But the effort failed, and since that time the colleges have not made any attempt to obtain aid from the State. And their success in raising funds by voluntary contribution is as great a compliment to the zeal of the managers, as is the intellectual and moral influence they have exerted upon society to the force of their ability and the purity of their motives.

The following sketches of the several institutions of this class now existing in the State will undoubtedly prove of interest in this connection. In a general way it may be stated that in each of these institutions a preparatory department is maintained, while in all both ladies and gentlemen are admitted to equal privileges, equal duties, and equal honors.

Adrian College.

This institution was established at Adrian, in 1859, under the auspices of the Wesleyan Methodist Church, with the understanding that the citizens of Adrian, who had raised subscriptions to the amount of $30,000, should have an equal voice in the administration of its affairs. Twenty acres of ground lying in the western part of the city, which it overlooks, were donated by Hon. L. G. Berry and Dr. D. K. Underwood. On the 22d of March, 1859, the twelve trustees, previously chosen, formally adopted and signed certain articles of association, and in other respects complied with the requirements of the act of the Legislature providing for the incorporation of institutions of learning. By these acts the institution became a body corporate, and was invested with

all the rights and privileges conferred by the act of the Legislature on such corporations.

The erection of four college buildings was immediately undertaken. To facilitate this work, a large number of scholarships was sold and the proceeds invested in the construction of the several edifices. The institution, although well patronized by students, was, however, much straitened for want of funds during its earlier years, and as a consequence a considerable debt was incurred. While struggling with this embarrassment the institution was, in 1867, after a prolonged and careful consideration of all interests involved, transferred in due form to a new board of trustees, nominated by and representing a corporation known as the "Collegiate Association of the Methodist Protestant Church." This body, in taking possession of the College and all its appurtenances assumed all the financial liabilities of the institution in consideration of the same, which at that time amounted to more than $30,000, and entered into obligations to endow it in a sum not less than $100,000. Immediately after the completion of the transfer the association proceeded to pay off all pressing liabilities, since which time the College has gone on doing its work faithfully and well.

At the regular annual meeting of the trustees, held June 28, 1870, the requisite notice having been given at the previous annual meeting, the articles of association under which the College had been originally incorporated were amended so as to admit of an increase in the number of the corporation from twelve to thirty. The object of this change was the admission, as trustees of the College, of all those who constituted the corporation of the "Collegiate Association." At the same time the election of trustees was vested in the General Conference of the Methodist Protestant Church, which was empowered to elect, at each of its quadrennial sessions, one-half of the entire board. By these amendments the institution was placed under the supreme control of the denomination whose funds are so largely invested in it; and which is, therefore, made responsible for its success, at least so far as the furnishing of students and financial means is essential to that result. At the annual meeting of the trustees, held June 21, 1876, a further change in the articles of association was effected, whereby the alumni association of the College was empowered to elect from its members six additional trustees. By this means the alumni of the institution are brought into heartier sympathy with the College, and they cannot, as a consequence, fail to feel a greater interest in the success of their Alma Mater.

Four large buildings have been erected, leaving space for one more, a central building, to complete the design. The south hall was burned in 1869, but soon afterward rebuilt. The north, or gentlemen's hall, during November of the present year, has also become food for the flames; but it is quite probable that it will be replaced during the coming year.

The estimated value of grounds, buildings, apparatus, and other property of the institution was reported in 1880 at $133,000, and the amount of its endowment fund at $83,878.70. The institution is well equipped with a very fine museum, a library of over 3,000 volumes, and other means for making its work of instruction very successful.

Rev. A. Mahan, D. D., was the first President of Adrian College. He remained in this position for several years, resigning in 1864. In 1867 he was recalled to the presidency, which he accepted, and in which capacity he served until the transfer of the College in 1869. Rev. G. B. McElroy, D. D., was chosen President in 1872 and has continuously filled that position until the close of the last academic year, at which time he tendered his resignation.

The institution numbers nine professors in its faculty, several of whom have been identified with the College since its organization. It has graduated 203 students, the last class numbering 13. The total enrollment of students during the year 1880 was 203, many of whom were ladies.

ALBION COLLEGE.

In the year 1833, Dr. B. H. Packard, then of Ann Arbor. Rev. H. Colclazer and Rev. E. H. Pilcher, having consulted together, resolved to seek to establish a seminary of learning under the patronage of the Methodist Episcopal Church.

In conformity with this design, an invitation was given to persons in different localities, to make propositions of what they would do for the purpose of securing its establishment among them. In the summer of 1834, several such propositions were made and submitted to the Ohio Conference, which, at that time, had jurisdiction here. At this session of that body, a committee was appointed, with full powers to accept of the best proposition and to secure from the Legislative Council a charter. That committee fulfilled its duties—accepted the proposition from Spring Arbor, in Jackson county, and in March, 1835, the charter of the "Spring Arbor Seminary" was passed and approved. Soon after this the board of trustees was organized, and various efforts were made to secure the erection of buildings and the establishment of the school, but without success. The friends of the enterprise and the original projectors became much discouraged, and feared that the scheme would have to be abandoned for the present, on account of the difficulties thrown in the way by some who were the professed friends of the object. But in the summer and fall of 1838, the proprietors of the village of Albion, and other residents, made an offer of liberal assistance to the trustees, provided the location could be changed to that place. This offer was accepted, and their consent for the necessary change in the charter was sent to the Legislature. The charter was amended as desired, and the board of trustees was reorganized in the village of Albion, on the 29th of April, 1839. Nothing of any importance was done towards the erection of buildings, until the spring of 1840, when an agent was appointed to solicit donations and subscriptions, and to take preparatory steps for building. At this time a system of scholarships was adopted, which succeeded well for a time, but ultimately became a source of embarrassment. That system was, to give a certificate of free tuition for four years for every hundred dollars subscribed, but not available to the holder until the whole amount was paid. The reason of the embarrassment, growing out of this system, was, that the available subscription was mostly used up in the erection of buildings, and nothing was left to support the faculty.

The corner stone of the center building in the plan, was laid in August, 1841, and it was ready to be occupied in November, 1842, when the school was opened with a large number of pupils. The first public examination and exhibition took place in March, 1843.

On the 6th day of June, 1849, a new plan of scholarships was adopted and put into operation, with a view to raise a permanent endowment fund, which has succeeded very well. By an amendment of the charter, at the session of the Legislature in 1850, the "Female Collegiate Institute" was engrafted on the Seminary. The first class in this department graduated in August, 1851. In 1857 the name of the institution was changed, by legislative enactment, to "Wesleyan Seminary and Female College at Albion," and by similar enactment in 1861, it was simplified to "Albion College." The full college courses

of study were not established until 1864. The College has power to confer such degrees as are usually conferred by colleges, and requires such thorough and systematic courses of study as will secure a mental development, culture and discipline that should always be made a condition precedent to a degree.

The college buildings are pleasantly located in the village of Albion, on a lot of eighteen acres, on a portion of which a native grove of oaks still remains. The buildings are of brick, and being on an elevated position, command a fine view of the village and surrounding country. These buildings are three in number, the central one being 40x100 feet and four stories high; the other two being each 46x80 feet and three stories high. In these are accommodations for all the departments of educational work.

The estimated value of property belonging to the College is $50,000, while the amount of productive funds aggregates $170,000. The library, containing 2,500 volumes, supplies the students with the best works in every department of legitimate thought.

Rev. L. R. Fiske, D. D., LL. D., who in the earlier years of the Agricultural College was a professor in that institution, is the President of Albion College, and under his able and efficient management the institution is enjoying much prosperity. The faculty of the institution comprises eleven professors. The whole number of students in attendance during the present year has been 244.

Prior to 1851 no degrees were conferred by Wesleyan Seminary or Albion Female College. From 1851 to 1863, inclusive, 116 ladies received the degree of Mistress of the Arts and Sciences from Albion Female College. From 1864 to 1880, inclusive, the whole number of graduates from the College aggregates 130.

Battle Creek College.

The establishment of a college in the city of Battle Creek was proposed by Elder James White, of the Seventh Day Adventists, in the spring of 1872, and at his call, a meeting of citizens interested in the project was held in April of the same year, at which a committee was chosen to act in reference to the organization of an educational society. By the action of this committee the sum of $54,000 was pledged to the enterprise.

As sufficient means were thus secured to warrant the organization of a legal society, a meeting was held March 11, 1874, in the city of Battle Creek. Seven trustees were elected to hold real estate, to erect suitable buildings, and to establish and manage a college for instruction in the sciences, the languages, and the Holy Scriptures.

The conditions of the law of the State of Michigan "for the incorporation of institutions of learning" having been complied with, the trustees proceeded to select a location for the college buildings. The grounds chosen consisted of twelve acres located on a beautiful eminence in view of the Kalamazoo river, and were purchased at a cost of $16,000. During the same year a college building was erected at a cost of about $50,000.

This building is a beautiful three-story brick structure, with a large basement devoted to a philosophical and chemical laboratory, recitation rooms, and steam heating apparatus. The first and second stories are each divided into two spacious rooms of equal size, each capable of seating eighty students. The third story consists of a fine lecture hall, used also as a chapel, where students assemble every morning for worship. The observatory which crowns the edifice gives a most delightful view of the surrounding country for a number of miles. The wooded hillsides, winding rivers, fertile fields, and beautiful little

lakes, together with the shaded streets and pleasant cottages of the city, in the suburbs of which the college is located, combine to make a varied and inviting prospect. The grounds, or campus, by constant care and the exercise of art and good taste in improvements, has been made very beautiful and attractive. On the west and south sides are ample lawns interspersed with flower beds, while the east side presents a rare combination of natural and artificial beauty, in shade and ornamental trees, walks, shrubbery, flowers, etc. The campus at present consists of only seven acres, as two tiers of building lots have been cut off from the original plot, one from the west and one from the south side. Upon these, private dwellings have been erected for the accommodation of members of the faculty and such families as have the confidence of the Board and are willing to accommodate students.

The design of the College was primarily to meet the wants of young men and women anxious to labor in the various departments of missionary work. But, as in every growing denomination, the demands became urgent for an institution on a broader basis, where all the children of the friends of the enterprise might receive thorough mental and moral discipline, and thus secure the best preparation possible for the duties of active life. In accordance with these pressing needs, the College has grown, during the five years of its existence, in a manner unparalleled in the history of any denominational school.

The number of professors composing the faculty of this institution is fourteen, Elder James White, the founder of the College, being its President. The whole number of students in attendance during the college year of 1879–80 was 489, of which 192 were ladies and 297 gentlemen. The estimated value of the buildings and grounds and other property is placed at $67,000, while the annual income is about $15,000. The College is well equipped with a library, museum, and apparatus, which furnish ample means for instruction and illustration.

Grand Traverse College.

In 1862, Rev. J. B. Walker, a prominent clergyman of the Congregational Church, in connection with several other gentlemen, purchased 2,500 acres of land in Benzonia, Benzie county, designing it as a pecuniary basis for a school that should, as fast as the increase of population in that part of the State would warrant, grow up to the full dimensions of a college. Such increase has not been equal to their anticipations; the land, though of a valuable character, has sold slowly; a heavy loss has been sustained by fire; and while with indomitable perseverance a school has been kept open since 1863, with sometimes as many as seventy pupils, its work has, as yet, been only preparatory. Prof. L. D. Maltby is now at its head. The estimated value of its property is $40,000, while the amount of its productive funds is reported at $10,000. This institution has done a good work in preparing teachers for the primary schools in its vicinity.

Hillsdale College.

Early in the year 1844 a movement was inaugurated by the Free Will Baptists in Michigan looking towarding the founding of an institution of learning. This movement finally resulted in the establishment at Spring Arbor, Jackson county, of an academy, which subsequently, in 1845, under a charter from the Legislature, expanded into the Michigan Central College. The school was opened in December, 1844, with Rev. D. M. Graham as principal. A log building, that had formerly been used as a town-house, furnished the first home to the infant College. Soon, however, three buildings more suitable for the

purpose were erected; a good, though not large, library was collected; and a fine philosophical apparatus was obtained. After filling the office of principal of the Academy, and subsequently that of president of the College very acceptably for several years, Mr. Graham resigned, and was succeeded by Rev. E. B. Fairfield. Open to all, irrespective of nationality, color, or sex, the College grew so rapidly that enlargement became essential to the adequate discharge of its functions. An appeal to the residents of the vicinity for help to accomplish this design having received no favorable response, removal became the only alternative. This proposal aroused an intense opposition from the citizens, who learned too late the value of having the institution located in their midst. The struggle that ensued resulted in the loss of all the property, to the amount of nearly $25,000. The College, however, found a hearty welcome in Hillsdale, whose residents, by their liberality, more than repaid the loss experienced by removal. Hon, E. Blackmar donated a beautiful plat of twenty-five acres, and the people of the county erected the buildings, the corner stone of which was laid July 4, 1853. The main building was completed during the fall of 1855, and thrown open to students November 7 of the same year, when the exercises of Hillsdale College proper, organized under a new charter, began with Rev. E. B. Fairfield as President, and Professors H. E. Whipple, Ransom Dunn, C. H. Churchill, and Misses Whipple and Mahoney as associates.

President Fairfield resigned in 1870, and was succeeded by Rev. James Calder, D. D., of Pennsylvania. Dr. Calder filled the office but two years, being called to the presidency of the Pennsylvania State College at Bellefonte. He was succeeded by Dr. Graham, who had been the first President of the institution under its former charter, when located at Spring Arbor. Dr. Graham remained two years, when he tendered his resignation, and Rev. D. W. C. Durgin, the present incumbent, was chosen to the office.

For nearly twenty years the College enjoyed the greatest prosperity, and everything augured well for the future, when, on the night of March 5, 1874, the large and imposing building first erected was nearly destroyed by fire. The friends of the College were stunned by the blow, but the needs of the hour soon awakened them to effort, and, as a result, in the place of the old building, five new ones, of a more modern style of architecture, have been erected. They are of brick, three stories high, with basements, and are arranged on three sides of a quadrangle. Their size is, respectively, in feet, 80 by 80, 48 by 72, 48 by 72, 80 by 60, and 52 by 72.

The institution has fifteen instructors included within its faculty at the present time, and during the last academic year enrolled 608 students. Its alumni number 440, nineteen of whom graduated at the commencement of 1880. It is well supplied with necessary means of illustration and instruction, and has a library of over 7,000 volumes. The estimated value of its grounds, buildings, apparatus, and other property, is reported at $125,000, while its productive funds aggregate $120,000.

Hope College.

This institution is located in the city of Holland, Ottawa county, and is under the auspices of the Reformed (Dutch) Church in America. Holland Academy, from which Hope College is an outgrowth, was founded in 1851, and was conducted for several years by Walter T. Taylor. He was followed by Rev. F. E. Beidler, who remained but a short time, being succeeded by Rev. John Van Vleck in 1855. In March, 1859, Mr. Van Vleck resigned, and Rev. Philip Phelps was appointed Principal of the Academy, continuing to serve in

that capacity, and as President of Hope College, after its incorporation in 1866, until 1878, when he resigned, and Rev. G. H. Mandeville, D. D., the present President of the College, was chosen to the office.

The first incorporators of Hope College numbered seventeen, principal among whom was Rev. Albertus Van Raalte, D. D., the founder of the Holland colony in Michigan. According to the articles of incorporation the council or board of trustees must be composed of members of the Reformed Church in America, and elected or appointed by the General Synod of that church. When the General Synod first appointed the council an endowment of the institution was initiated with a grant of $30,000. Since that time this endowment has been increased to about $70,000, a considerable part of which is, however, unproductive at present.

The buildings of the institution are seven in number, two being of brick, the principal one of which is three stories high with basement. These are located in a beautiful campus of sixteen acres. The estimated value of grounds, buildings, apparatus and other property, is given at $45,000. The library consists of 4,700 volumes. A weekly newspaper entitled "De Hope" has been published in the Holland language for a number of years by the professors of the institution. It has a circulation of over 2,000 copies, and more than repays the expense of publication.

There are eight professors included within the faculty, while the number of students in attendance during the last college year was 121. The College has graduated 81 students, ten of whom received their diplomas at the commencement exercises of 1880. During the earlier years of the institution, women were not admitted as students, but in 1878 the barrier was removed, and quite a large number of young ladies have since that time been in attendance.

Hope College owes its origin to the traditional care of the Reformed Church in America for the securing of an educated ministry, and in this the example of the founders of "Harvard" has only been followed. The first and firmest friends of education have always been prompted quite largely by religious motives. Of the graduates of Hope College a considerable proportion are clergymen, while the remainder are distributed among various other professions.

Although Hope College is denominational, yet by the law of its incorporation, it can have no "religious test." The doors are open, and a welcome is given to all who submit to its regulations. As a Christian school, however, it inculcates gospel truths, and demands a consistent moral character and deportment. This College is an important educational center for western Michigan, and is an acknowledged factor for good in the improvement of its population, especially of the thousands of adopted citizens from the Netherlands. The instruction is altogether in English, and after the most approved methods, and aims to build up the best interests of the State.

Kalamazoo College.

In 1829 Thomas W. Merrill, a young Baptist minister from Maine, found his way to the then little village of Ann Arbor, where he opened the first classical school in the interior of Michigan. In 1830 he removed to Prairie Ronde, where he built a house designed for a school and for holding religious meetings. His heart was set upon establishing a literary institution, and in the fall of 1831 he visited the State of New York to secure aid, but with little encouragement. He then returned to Michigan, and having secured subscriptions to the amount of seventy dollars, after having spent two years at his own

expense, he purchased a site for a school in Bronson, now Kalamazoo. In 1832 he procured from the Territorial Legislature a charter for the "Michigan and Huron Institute." Trustees were appointed, but nothing appears to have been done till 1835, when the citizens of Kalamazoo raised a subscription amounting to $2,500, and the school was then established. One hundred and fifteen acres of land south of the village was purchased, but a site for the buildings was finally established on ten acres of rising ground on the western border of the village. In 1837 the Legislature re-incorporated the school as the "Kalamazoo Literary Institute," under which name it was known until 1855, when the act of incorporation was amended so as to confer college powers, and it became "Kalamazoo College." The original incorporators were Caleb Eldred, William Meek, William Duncan, H. H. Comstock, Nathaniel Millard, John Clark, F. P. Browning, Anson Brown, John Booth, R. B. Kercheval, Thomas W. Merrill, John S. Twiss, C. H. Swain, Robert Powell, Stephen Goodman, and C. A. Lamb.

No effort was made to endow the institution, nor was any debt suffered to accrue from its operation, during the first twenty years of its history. Its expense of instruction was not large, as its course of study was chiefly preparatory. Moreover, the inferior condition of the public schools, and their lack of all high school facilities, left the people quite ready to extend to a good select school a remunerative patronage. And much of the time other corporations assumed the current expenses of the Institute, as for a while the State University supported it as one of its branches; and afterwards the Baptist Convention adopted it as the literary helpmate for its theological education. Yet the property of the Institute always remained distinct, and its board of trustees allowed no intermission of their meetings and controlling care. In 1853 an effort was inaugurated to raise an endowment of $30,000 by the sale of scholarships or otherwise. In about two years $20,000 was secured, chiefly in scholarship notes. Since that time other efforts have been made occasionally, so that at the present time the amount of the productive funds of the institution is about $64,000. The present property of the College in grounds, buildings, apparatus, etc., is estimated at $100,000.

After the initiatory work of Mr. Merrill, heretofore mentioned, a Mr. Marsh was chosen as teacher. His successor was Walter Clark. The next teacher was Nathaniel A. Balch, and the next, David Alden. The fifth principal teacher was William Dutton, appointed in 1840, the year of his graduation from Brown University, and continuing three years, soon after which he was arrested in his work by death.

To Professor J. A. B. Stone fell the lot of following Mr. Dutton. And the short course of the one is in contrast with the long course of the other. Dr. and Mrs. Stone commenced their labors as instructors in 1843. With the entrance of the institution upon its full college career, in 1855, Dr. Stone was appointed President, while his no less distinguished wife was installed as Principal of the female department, for which an elegant building had been recently erected. In 1864 Dr. Stone resigned, and Hon. John M. Gregory, who had been for six years previously Superintendent of Public Instruction, was elected President. In 1867 Dr. Gregory resigned in order to accept the Regency of the Illinois Industrial University, and was succeeded by Rev. Kendall Brooks, D. D., of Philadelphia, who still holds the position.

The college grounds consist of twenty-six acres, traversed by the Michigan Central railroad and by Michigan avenue. It is, consequently, divided into three sections. The original building, erected in 1847, stands on the western

section. This building is of brick covered with mastic, and is four stories high. It contains the library, of 3,200 volumes, two society halls, study rooms, and dormitories for sixty young men. Another building, erected in 1858, and known as Kalamazoo Hall, contains a chapel, eight recitation rooms, four music rooms, an art room, a room for apparatus, and a hall for the young women's literary society.

The faculty of the institution is composed of seven instructors, including the President. One hundred and forty-seven students were in attendance last year, while the whole number of graduates, since the institution was incorporated as a College in 1855, is 129.

While the founders of this institution were connected with the Baptist denomination, and the Baptists of Michigan regard it as their College and its maintenance as their duty, yet the trustees are not all Baptists, nor is any restriction placed on students with reference to their religious opinions. The privileges of the institution have from the first been open to all without any distinction as to sex or race.

It is the stated purpose of the trustees and officers of Kalamazoo College to maintain a course and grade of instruction fully equal to that of the State University; not with any desire to undertake an ambitious and unfriendly rivalry with that institution, but rather with a generous purpose to emulate its example, in maintaining high standards of scholarship in the State. Admitting of no necessary rivalry between institutions all seeking the same noble and useful aims,—the promotion of human learning, and the spread of higher and of Christian education,—Kalamazoo College seeks only to fill wisely its own chosen place in the great educational column, and to do the work assigned it by its Christian founders.

Olivet College.

This institution is situated in the village of Olivet, Eaton county, and is under the general care of the Congregationalists and Presbyterians. The selection of its location partakes somewhat of the romantic, which may be briefly stated as follows: In 1843 Rev. J. J. Shipherd, one of the founders of Oberlin College eleven years previously, started on a prospecting tour in search of a place in Michigan suitable for the location of an institution similar to the one he had assisted in establishing in Ohio. His journey leading him for a considerable time through an almost pathless wilderness, he was frequently at much trouble to keep his bearings. Having stopped to rest one day he was dismayed to find, upon resuming his course, that he had hopelessly lost his way. Several excursions in search of his true route ending in his return each time to the same spot, he directed his attention to a closer examination of his surroundings. The forest was a grand growth of oak, maple, and ash, and it stood on a beautiful elevation of gravelly soil, bordered by a small stream, and he said "this shall be the Mount Olivet of my desire." A tract of land including this spot was afterwards purchased, and returning to his home in Ohio, he enlisted the sympathy and coöperation of several families of his friends, and with them set out for the place designated for the colony and future college early in February, 1844.

The ten months next following were spent by the colonists in removing the primeval forest, constructing cabins for themselves, transporting through the woods resources for their subsistence, and in combatting the hardships and diseases incident to new settlements. During this period, also, their leader *was suddenly* removed by death, leaving his brethern worn down with toil and

sickness, and nearly disheartened. However, in December of the same year, the embryo "College" was declared ready for students. At the opening of the first term nine students were in attendance. A small room in one of the private houses constituted chapel and recitation room. Rev. Reuben Hatch and Rev. Oramel Hosford were the instructors.

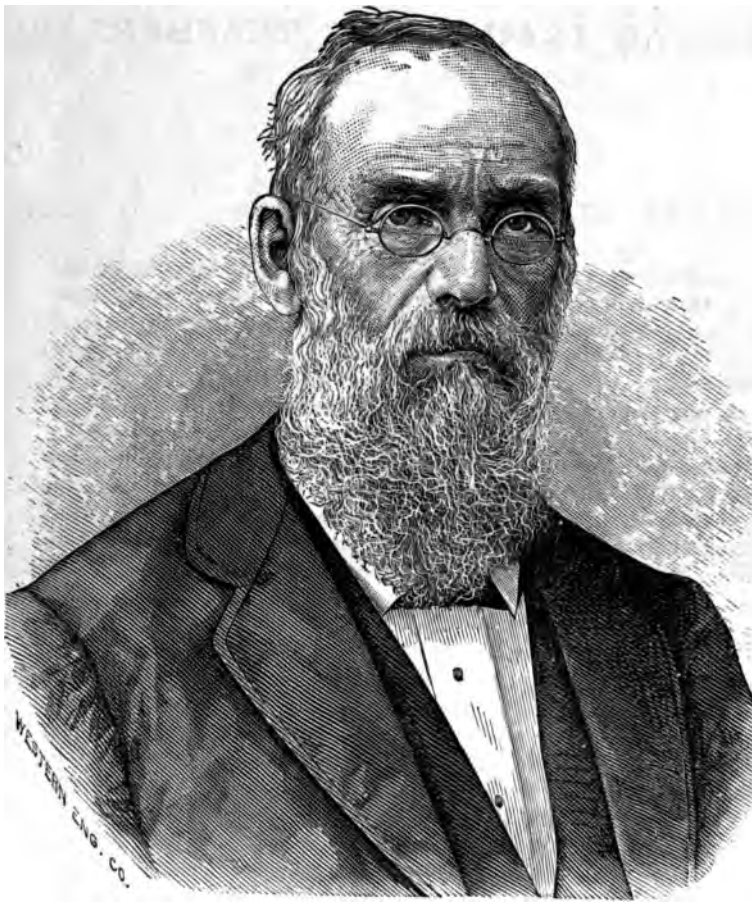
For four years the school struggled on, gradually increasing in numbers in attendance, though repeatedly threatened with ruin by the conflagration of the school edifices, but without a charter or recognized legal existence—the State Legislature rejecting all appeals for a college charter. In 1848 the trustees, consisting of James Douglass, Carlow Reed, Oramel Hosford, William Hosford, Enoch N. Bartlett, John G. Barnes, Charles M. Bordwell and Wilson C. Edsell, obtained from the Legislature a charter conferring all the privileges of a college foundation, except that of conferring degrees in the arts, under the title of "Olivet Collegiate Institute." The school continued in operation under this charter till 1859, a period of eleven years, when it expanded its title and pretensions to the stature of a college, chartered under the general law of the State regulating such institutions. The new College had a faculty of five instructors: Rev. M. W. Fairfield, President; Rev. O. Hosford, Professor of mathematics and astronomy; Rev. N. J. Morrison, Professor of the ancient languages; Dr. A. A. Thompson, Instructor in chemistry and vocal music; Miss Mary J. Andrews, Principal of the ladies' department and instructor in French. At this time about 75 students were in attendance. A freshman class, one in the ladies' course, and another in the senior preparatory course, were formed, together with the usual classes in the common branches.

Shortly after its incorporation as a College, efforts were entered upon to raise an endowment fund. Various amounts were then and have since from time to time been obtained, so that at the present time, the total amount of productive funds under the control of Olivet College is something over $116,000; while the estimated value of the grounds, buildings, apparatus, etc., is $113,000. The buildings at the present time consist of two brick structures, each four stories high, besides two frame buildings.

In 1860 President Fairfield, on account of failing health, was forced to resign, and the duties of that office were distributed among the remaining members of the faculty until 1864, when Rev. N. J. Morrison, who had for several years been a member of the faculty, was chosen to the office. Dr. Morrison continued to serve in this position until 1872, when he resigned. The vacancy thus occurring remained unfilled for over two years, when Rev. H. Q. Butterfield, D. D., an alumnus of Harvard, was elected to the office. Dr. Butterfield was inaugurated in 1876, and still continues the President. The whole number of professors and instructors composing the faculty is twelve. The number of students in attendance last year was 201; while the whole number of graduates from the College is 133.

The institution is supplied with a college library containing over 7,000 volumes, besides a large number of unbound pamphlets. In connection with the library is a reading room well supplied with the leading journals of news, politics, religion, science, literature and art. The College is also the possessor of a valuable cabinet of shells, minerals and fossils, embracing more than 50,000 specimens, collected by Rev. Wm. B. Brown, D. D., of Newark, N. J., and valued at $18,000. In addition to these the institution has ample means, in the way of apparatus, etc., to illustrate in a very full and satisfactory manner the various sciences taught.

Olivet College ranks second to none in its high moral tone and the thoroughness of its literary work, while its location is greatly in its favor. Few villages in the State are better fitted by nature for a college than Olivet. It crowns a hill embowered in forest and shade trees, with diversified surface which presents eligible sites for buildings. Its quiet beauty at once attracts the notice of visitors. The place is healthful as well as beautiful, and the climate wholesome. The village as well as the College was founded by earnest Christian men, who early impressed upon both their own culture, character, and spirit. As a result, the atmosphere of the place is free from those things which divert or hinder the special work of the student, and most favorable to quiet, earnest, successful study.



IRA MAYHEW.

PROFESSIONAL TRAINING OF TEACHERS.

I. THE STATE NORMAL SCHOOL.

Among the first questions that presented themselves to the framers of our educational system was the important one of providing means by which competent teachers might be secured for the schools of the State. Superintendent Pierce, in his report for 1836, very ably presented the subject to the Legislature, giving a brief review of the German system of educating teachers for their profession, by means of normal schools, and recommended the adoption of a similar plan.

In 1842 Superintendent Sawyer called the attention of the Legislature again to the importance of establishing a normal school, and in 1843 the subject was also presented by Superintendent Comstock. But during those earlier years the State was struggling for financial existence, and nothing was done. In 1849 Superintendent Mayhew brought the subject again before the Legislature, and that year an act was passed providing for the establishment of a State Normal School.

The main design of this institution was that it should be a school for the professional training of teachers. It was placed by the act creating it under the direction of a State Board of Education, consisting of three persons, to be appointed by the Governor, and approved by the Senate. The Legislature of 1850 made the Lieutenant Governor, the State Treasurer, and the Superintendent of Public Instruction, *ex-officiis* members of the Board. The Superintendent was made the secretary of the Board, the State Treasurer its treasurer, and the Board was to elect its own president. All this was, however, changed by the Constitution adopted the same year, which provides for a board of four members, three of whom are elected by the people, to hold office for six years, one being chosen at each biennial election, and the Superintendent of Public Instruction, who is *ex-officio* a member and secretary of the Board.

Ten sections of salt spring lands were appropriated to put the School in operation. All materials and labor in the erection of buildings were to be paid for in warrants on the Commissioner of the Land Office; which warrants alone would be received for the land, at the rate of four dollars per acre. In addition to the above ten sections, fifteen sections were appropriated for a normal school endowment fund. The 9,600 acres were to be sold on the same terms as the primary school lands, at not less than four dollars per acre, and the proceeds to be placed in the State Treasury, under the same regulations as the other trust funds; and upon this (with the exception of $8,000, referred to below), together with unpaid balances in the hands of purchasers, the State pays to the School six per cent. annual interest.

The idea of erecting buildings by issuing land warrants was abandoned before anything was done; and in 1850 the ten and the fifteen sections were consolidated, the whole to constitute an endowment fund,—reserving such an amount for the erection of buildings and current expenses, not exceeding ten thousand dollars, as should be necessary in addition to donations. The amount so used was about eight thousand dollars. The minimum price of the lands was fixed at four dollars per acre; but lands that had not been appraised, were to be, and none sold at less than the appraised value. A large portion was appraised at less than four dollars,—some as low as a dollar and fifty cents per acre; but none could be sold at less than four dollars. It would seem that not much care or judgment was exercised in the selection of the lands.

The Board of Education held its first meeting in May, 1849. Propositions were received from the people of Ypsilanti, Jackson, Marshall, Niles, and Gull Prairie, each proposing to donate lands and money to secure the School. The proposition from Ypsilanti was to furnish pupils for the model school, whose tuition should amount to seven hundred dollars per annum for five years, rooms for the use of the School until buildings could be erected, $13,500 in money, also four acres of land. This being the most favorable proposition secured the location of the School at Ypsilanti. The school site, which appears not to have been included in the original offer, was subsequently enlarged by the purchase of four additional acres by the Board. Without delay the Board proceeded to the erection of a building fifty-five by one hundred feet in size, three stories high, at a cost of $15,200. The amount realized from subscriptions of citizens was $12,000 and was used in payment of expenses incurred for building. The building was completed and was dedicated by appropriate ceremonies, October 5, 1852. In October, 1859, it was partially destroyed by fire; but within six months was re-built with the $8,000 realized from insurance. There was, however, a loss of nearly $6,000 by the destruction of the library, furniture, apparatus, furnaces, etc.

In 1864 the Board of Education made an arrangement with the executive committee of the State Agricultural Society to erect a building seventy by forty feet, and two stories above the basement, to be used by the School, and to contain the museum of the Agricultural Society. The terms were that the society should contribute two thousand dollars, the citizens of Ypsilanti fifteen hundred dollars, and the Board of Education the balance for the erection of the building. During the year 1865 the building was inclosed, the work having been greatly retarded by the high price of materials and labor; and in September, 1868, the most that could be said of it was, "it has been inclosed, and rooms finished in the basement for the janitor." In the meantime the committee of the Agricultural Society had become discouraged, and in 1868, after an expenditure of three thousand two hundred and fifty dollars, assigned their interest in the property to the Board of Education. The Legislature, in 1869, appropriated $7,500 for the completion of the building, which was effected the same year. In 1871 the Legislature very justly voted an additional appropriation of $3,250 to reimburse the Agricultural Society for the money it had expended.

In 1878 the main building was enlarged at an expense of $43,347.18. Of this amount the citizens of Ypsilanti paid $2,105.80. This enlargement is 88 by 90 feet, and contains a hall capable of seating 1,200 persons. The value of grounds, buildings, and other property, at the present time is estimated at $85,000.

The last of the normal school lands were sold in 1868; since which time

there has been an occasional sale of land that was forfeited for non-payment of interest. The entire amount of land was 16,000 acres; and adding the eight thousand dollars of the fund used for current expenses, it appears there was realized an average of about four dollars and fifty cents per acre.

The normal school endowment fund, on the 30th of September, 1880, was as follows:

Amount in the hands of the State	$56,635 32
Amount in the hands of purchasers	12,330 72
Total fund	$68,966 04

In addition to the annual avails of the fund, which have had no material increase for a number of years, and can have none from the same source hereafter, the Legislature has biennially made appropriations of money for defraying the current and other expenses of the School. The following table has been prepared in order to exhibit the total resources of the School since its first establishment. We have been unable to ascertain the amounts received from miscellaneous sources for the years prior to 1859:

YEAR.	Income from Permanent Fund.	Legislative Appropriations.	Receipts from Other Sources.	Total Resources.
1850	$283 32	$470 30		$753 62
1851	10 40	3,060 69		3,071 09
1852	275 00	3,556 80		3,831 80
1853	1,837 62	3,306 53		5,144 15
1854	2,265 75	5,740 85		8,006 60
1855	3,085 09	3,404 10		6,489 19
1856	3,450 84	7,884 86		11,335 70
1857	3,941 75	6,093 77		10,035 52
1858	4,045 90	2,920 34		6,966 24
1859	4,050 58	7,716 17	$902 50	12,669 25
1860	4,367 25	8,632 75	1,221 00	14,221 00
1861	4,169 50	5,130 50	1,246 00	10,546 00
1862	4,225 74	5,774 26	1,555 00	11,555 00
1863	4,334 83	6,932 81	1,532 00	12,799 64
1864	4,316 14	7,083 36	1,562 00	12,961 50
1865	4,301 30	5,198 70	1,901 00	11,401 00
1866	4,670 49	5,829 51	1,630 00	12,130 00
1867	4,587 91	4,912 09	3,011 83	12,511 83
1868	4,518 80	8,981 20	2,417 00	15,917 00
1869	4,582 08	13,917 92	2,556 00	21,056 00
1870	4,466 03	15,033 97	2,893 40	22,393 40
1871	3,968 14	15,281 86	2,781 60	22,031 60
1872	4,516 03	19,483 97	2,839 15	26,839 15
1873	4,615 93	15,384 07	2,671 00	22,671 00
1874	4,193 93	22,806 07	2,320 00	29,320 00
1875	4,277 88	16,091 86	2,396 00	22,765 74
1876	4,256 88	12,743 12	3,173 43	20,173 43
1877	3,731 11	17,568 89	2,919 00	24,219 00
1878	7,273 99	53,226 01	4,963 30	65,463 30
1879	4,291 60	26,900 89	2,359 50	33,551 99
1880	4,290 49	21,482 51	2,040 55	27,813 55
Totals	$117,202 30	$352,550 73	$50,891 26	$520,644 29

The law establishing the State Normal School defined its purpose to be the

"instruction of persons, both male and female, in the art of teaching and in all the branches that pertain to a good common school education; also to give instruction in the mechanic arts and in the arts of husbandry and agricultural chemistry, in the fundamental laws of the United States and in what regards the rights and duties of citizens." This definition of the work and scope of the Normal School has never been changed by any direct or amendatory enactment. Several things have, however, tended very materially to change the plan of the School.

It will be seen that the above statement of the work of the Normal School really includes all the work originally planned for the branches of the University. At the time the Normal School was projected, the branches of the University had been permanently discontinued, and the high schools of the State were not definitely planned. The union school law had just been enacted, but it did not then contemplate any such development of first-class secondary schools as has since resulted. There was, in fact, nothing in the way of public school facilities between the district school and the University. The branches had contemplated giving ample facilities for normal and industrial or agricultural training. The Normal School, therefore, as the only state school of the same grade, was to be a teachers' school, a farmers' school, and an academy, all in one. In reality the academy had but little more right to a place in a true normal school than had the farmers' department. But for the time academic instruction had to be furnished there because it was to be had nowhere else. The union school law had not yet developed a half-dozen high schools in the State. The private academies and seminaries were of very fluctuating character. The only safe way to secure academic training for the special work of the School was by supplying the academy within the Normal School itself. This was done by the establishment of an academic department and by extended courses of academic work in the normal department. No considerable attempt was made at the Normal School to meet the demands of an agricultural college, and very soon after its opening in 1852 the subject of a separate farmers' school began to be agitated. In 1855 the law establishing such an institution relieved the Normal School of any further work in that direction.

The academic work of the School, however, remained a necessity for many years. The slow development of the union and high schools made it necessary that the Normal School should be prepared to give any range of academic instruction required by its students. This necessity, however, came to be regarded as only a temporary one as the development of the graded and high school system of the State became more general. The law establishing the Agricultural College had very greatly aided the Normal School in confining its work to its main purpose. The development of the high schools did even more in this direction; and the State Board of Education soon began to look forward to the time when the School should be relieved of a large share of its preparatory academic work, and thus be enabled to confine itself to legitimate professional instruction of teachers for the public schools. For the past ten years this step has been agitated by the friends of the Normal School.

Believing that the time had come to make some change in accordance with this view of the true field of the Normal School, the State Board of Education, at a meeting held March 8, 1878, appointed a committee consisting of its president and secretary to investigate the propriety and necessity of a change in the courses of study. This committee obtained the views of the various members of the normal school faculty and others as to needed changes in the

work of the institution and reported at a subsequent meeting of the Board, making the following recommendations:

1st. Enlarging the school of observation and practice, so as to constitute a graded school representing all the departments of our best graded schools, so that students applying for admission to the Normal School, deficient in academic preparation, may be able to make such preparation in the school of observation and practice.

2d. This school of observation and practice to be under the supervision of the principal of that school with two skilled assistants; but the teaching to be done by normal students under the direction and inspection of the respective professors of the Normal School.

3d. To establish in the Normal School three courses of study, of one year each,—the common school, higher English, and language courses—fitting teachers respectively for the lower and higher grades in our common and graded schools.

4th. Aside from general reviews in connection with professional instruction, the Normal School to be confined to professional instruction.

5th. The requirements for admission to the Normal School should be carefully and fully stated in the prescribed courses of study, and students admitted on certificates from our high schools should still be required to pass examination in the elementary branches.

6th. It is recommended that in the prescribed courses of study, both for the school of observation and practice and for the Normal School proper, more attention be given to drawing and English history and literature.

The committee did not think there would be any difficulty in combining and modifying the several schemes or courses of study, so as to remodel them on the plan proposed, prescribing just what should be pursued in the school of observation and practice, and what should be pursued in the Normal School proper. They deemed the school of observation and practice an absolutely essential part of the Normal School, without which, and without full and careful teaching in which by the students of the Normal School under their respective instructors, the Normal School would fail to send out teachers fully fitted for the work of their profession.

The plan, as above outlined, was adopted by the Board without dissent, and the courses of study and requirements for admission were modified in accordance therewith. The Board realized that the change was one quite in advance of any thing previously undertaken, but they believed the conditions in this State were especially favorable to the success of such an undertaking. No other State has a so highly developed class of secondary schools doing academic work of a high grade and ready to give the needed preparation for the professional courses of the Normal School. But the great merit of the plan was that it was one upon which the Board, the faculty, and the best friends of the School throughout the State could agree, and which therefore was likely to have a fair trial and to be made the basis of whatever improvements or changes time and experience might suggest.

The sole aim of the Normal School is to qualify teachers for their work in all departments of our district and graded schools, to increase their teaching power and to send them forth to their fields of labor, filled with the spirit of their profession. The various courses of study, methods of teaching, practice, and criticism in the model school, higher professional instruction, have been carefully prepared to meet, as far as possible, the wants of every class and grade of our public schools. These have been modified and improved from

year to year as experience has suggested. It is believed that the various courses prescribed will, when thoroughly mastered, fit young gentlemen and ladies for positions as assistants, principals, and superintendents in all classes of the public schools.

The first Principal of the Normal School was Prof. A. S. Welch, now President of the Iowa Agricultural College. Prof. Welch served very acceptably in this position until 1865, when on account of failing health he was forced to resign, and Prof. D. P. Mayhew was elected as his successor. In this position Prof. Mayhew continued until 1871, when he resigned and was succeeded by Prof. Joseph Estabrook. Under Prof. Estabrook's faithful and efficient supervision the Normal School has ever been prosperous, and many of its friends have regretted to hear within the past year of his resignation. As successor to Prof. Estabrook, the State Board of Education has chosen Dr. Malcolm MacVicar, late Principal of the New York State Normal School at Potsdam, and with such a man as Dr. MacVicar in charge, it is believed that greater prosperity than ever is in store for the School. Within the faculty of the Normal School have been numbered not a few of the first normal instructors of the country,—men and women who have shown by their works that they were ably and efficiently filling their appropriate spheres of usefulness. The whole number of instructors employed in the Normal School at the present time is twelve, including the Principal.

During the school year of 1879–80 there have been in attendance at this institution, four hundred and sixty-two students. Since the School was first opened more than 10,000 students have attended for a longer or shorter period. Eight hundred and forty-three ladies and gentlemen have completed a full course of study and graduated, and have been engaged in teaching, on an average more than three years each, while a large number are occupying prominent positions as educators in this and other states. Of the undergraduates it is difficult to obtain definite information, but it is a well known fact that a very large proportion of them have been engaged in teaching, and many of them also have arisen to places of prominence in educational work.

II. TEACHERS' INSTITUTES.

The first reference to teachers' institutes as a distinct means of increasing the usefulness of the public schools, which we are able to find in the annual reports of the several Superintendents of Public Instruction, was made by Superintendent Mayhew, in his report for 1845. While normal schools were considered as indispensable to the perfection of the school system, yet the fact was recognized that many teachers would be unable to attend such institutions, and in consequence it was deemed that teachers' institutes might be organized in each county and made accessible to every teacher, thereby accomplishing a great amount of good. "Teachers' institutes," said Mr. Mayhew, "are teachers' associations with protracted sessions. Where teachers' institutes have been established, the teachers of a county usually spend almost two weeks in session, fall and spring, with a competent principal and experienced board of instruction, employed by a committee provided for that purpose. The several branches of study ordinarily pursued in our common schools are reviewed; the different methods of instruction and modes of government are discussed, and plans are laid for concert of action. Lectures are generally delivered before these institutes by professional gentlemen and others, who, from their devotion to the

great work of popular education, might appropriately be denominated common school missionaries. . * * * Would it not be well to encourage their establishment in this State by legislation? I entertain the opinion, that if the State has $25,000 to appropriate annually to the promotion of common school education, it would be productive of greater good to apply one or two thousand dollars, or even five thousand dollars, to assist in defraying the necessary expense of maintaining teachers' institutes in the different counties, and the residue to the support of schools, than to apply the whole to the payment of unqualified teachers, or even to those of ordinary attainments."

In his report for 1846, Superintendent Mayhew again called attention to the importance of teachers' institutes, and stated that the first institute organized in the State had been held during October of that year in the village of Jackson, under the auspices of the Jackson County Teachers' Association, at which about thirty teachers had attended. In 1847, Mr. Mayhew reports the awakening of a general interest on the subject, and states that "not less than a dozen" institutes had been held. Of these Jackson county had enjoyed the benefits afforded by three; Washtenaw county, two; Allegan county, two; while the various locations of the others are not given. In speaking of one held in Allegan county, he said: "It was my fortune to be in attendance the first two days of its sittings. The enlightened policy pursued by the friends of education in that county, and the zeal they manifest, are above praise. Rarely have I been so highly gratified as at my first visit to Gun Plains, where the institute was held. As I came in sight of the school-house, I saw an ox-team drive up and stop. Several females got out of the wagon, and went into the house. It occurred to me they might be young ladies who had come up to attend the sittings of the institute. On inquiry, I ascertained that this was a fact, and that they had come for this purpose, in a lumber wagon drawn by oxen, about forty miles!"

During the year 1848 several institutes were held, but how many or where is not now a matter of record that we have been able to find. In the report for this year Superintendent Mayhew again brought the subject to the attention of the Legislature and urged the importance of the State's providing for the expense of holding at least three or four teachers' institutes annually "in different parts of the State, as might best accommodate the *whole State*." "To render these institutes most advantageous," said Mr. Mayhew, "and to give them unity and efficiency, I think the Superintendent of Public Instruction should be authorized to associate with himself two or three persons of ability and experience,—persons of his own selection,—and attend the institutes of a single season, in regular succession, devoting six or eight weeks to them all."

From an intimation made by Superintendent Shearman, in his report for 1849, it is to be presumed that several institutes were held during that year, but further than this we have been unable to gather any information. In this report Mr. Shearman takes occasion to say:

> The establishment of a normal school, devoted to the education of teachers, will not, perhaps, even in time, supersede the advantages derived from the annual or semi-annual holding of teachers' institutes at various localities in the State. They are institutions which go hand in hand, mutually assisting each other, and conferring reciprocal benefits peculiar to themselves. To give the greatest efficiency, however, to teachers' institutes some provision for their support may be deemed indispensable. The distribution of a sum annually to the various townships has given life and vigor to our system of primary schools and induced a general interest in their behalf. A like effect would be produced in relation to this class of means for perfecting the knowledge and increasing the usefulness of teachers, by a similar limited appropriation annually in their behalf

During the years 1850, 1851, and 1852 institutes were held at various places in the State, at several of which resolutions were passed asking the Legislature to make appropriations for their support, while Superintendent Shearman repeatedly urged their importance as an acknowledged efficient means of improvement among teachers. During the month of October of the latter year, a state teachers' institute was held in the new normal school building at Ypsilanti, under the auspices of the State Board of Education, and immediately following the exercises of the formal opening of the State Normal School. This institute was attended for three weeks by over two hundred and fifty teachers of the State, and was under the immediate direction of Prof. A. S. Welch, Principal of the Normal School, assisted by several instructors of the School and professors of the University.

This institute was a means of awakening a more general interest in institutes than had formerly been manifested, and as a consequence the Legislature of 1855, in order to meet, in part, the demand for more efficient teachers, as well as to diffuse among teachers themselves, and through the community at large, a more just appreciation of the dignity and importance of the vocation of teaching, passed an act to provide for the holding of teachers' institutes. By the provisions of this act, the Superintendent of Public Instruction was authorized to hold institutes whenever reasonable assurance should be given that a number not less than fifty, or in counties containing less than 12,000 inhabitants not less than twenty-five teachers of common schools should desire to assemble for the purpose of forming an institute, which should remain in session not less than ten working days. For the support of these institutes the Superintendent was also authorized to draw from the State Treasury an amount not to exceed $200 for each institute and not more than $1,800 in any one year. This law, while not all that was desired, was an advance in legislation that gave great encouragement to the friends of education throughout the State. Immediately following the passage of this enactment, Superintendent Mayhew made arrangements for holding a series of institutes, and since that time, with the exception of the year 1858, a greater or less number of institutes have been held each year under the direction of state authority.

In regard to the sphere of the teachers' institute and its relation to the State Normal School, Superintendent Mayhew, in his report for 1855, said:

> The deep interest which both teachers and citizens have taken in these institutes as manifest by their attendance upon their daily exercises, as well as by their resolutions, place above a rational doubt the acceptability and usefulness of the well conducted teachers' institute of our State. Indeed, I think I may safely say it constitutes the most popular and inspiriting feature of our excellent school system. It does more to bring to counties in which they are held a knowledge of the capabilities and usefulness of the State Normal School than could be effected by any other instrumentality. While that institution is more thoroughly training a noble class of young men and women who are seeking qualifications essential to eminent usefulness, and who will, in due time, return to the counties from which they have been sent, and there, it is believed, exert an elevating influence, not only upon the schools they teach, but upon those round about, it is the office of the institute immediately to operate on greater numbers. Its power consists in the improvement of the teachers now actually in charge of our schools, and who will continue in charge of them, whether qualified or not; in leading the communities in which they may be held to appreciate more fully the importance of the teacher's calling, and to seek and adequately to remunerate, the services of those who are best qualified; and generally, in elevating the standard of attainment on the part of those to whom is to be committed the guardianship of our primary schools. The teachers' institute thus becomes in an important sense a coördinate of the Normal School.

In 1861 an amendatory act to the law of 1855 was passed which reduced the

time for which an institute was required to be held from ten days to five days, and made the limit of aid which might be given by the State to each institute $100 instead of $200, while the total amount that could be drawn from the State Treasury in any one year remained at $1,800 as before. The design of this was to increase the number of institutes that might be held in any one year, although the time during which they were to remain in session was reduced.

This law continued in force until the session of the Legislature in 1877, when, mainly through the efforts of Superintendent Tarbell, it was repealed, and a new law enacted in its stead. The provisions of this enactment are such that all examining boards and officers are required to collect from each male teacher receiving a certificate a fee of one dollar, and from each female teacher a fee of fifty cents. These fees are to be paid quarterly into the county treasury and set apart as a fund for the support of teachers' institutes. In addition to the fund thus derived, the Superintendent of Public Instruction may draw from the State Treasury for the support of institutes in counties where the local fund is not sufficient to meet the necessary expenses thereof, an amount not exceeding sixty dollars for each institute of five days' duration. The Superintendent of Public Instruction is also authorized to hold, once in each year, an institute for the State at large, which is denominated a state institute, and for the purpose of meeting the expenses of such an institute he may draw on the State Treasury for an amount not exceeding $400. The limit of aid which the State may give to institutes in any one year is fixed at $1,800.

Under the provisions of this act a new life has been infused into the institute system of the State. A large proportion of the counties now have an institute fund sufficiently ample to meet all the expenses of a good institute; while in the newer counties in which the fund is less, the State steps in to aid, and thus all portions of the commonwealth are enabled to enjoy the advantages afforded by these gatherings.

The first state institute provided for by this law was held at Lansing during the week beginning August 20, 1877, under the direction of Superintendent Tarbell. This institute was designed to be in some respects a model institute to afford thought and method for the county institutes to follow. Though it felt the disadvantages which attend the first attempt at an untried scheme, it was pronounced by all a valuable success. About two hundred persons were in attendance from various parts of the State, comprising very nearly all the leading teachers. The corps of instructors at this institute was composed of Hon. John Hancock, Superintendent of the schools at Dayton, Ohio; Dr. E. C. Hewitt, President of the Illinois Normal University; Prof. Robert Graham, of the Oshkosh Normal School, and State Institute Conductor for Wisconsin; and Prof. Jonathan Piper, of Chicago, who had been for several years engaged in institute work in Iowa. The aim in selecting these men was to secure the best workers in four of the neighboring western states, who should bring, for use in the institutes to be held in Michigan, the ripest thoughts and best methods in this important field of work. These men justified the expectations which their reputations had raised, and were the occasion of improved work in the county institutes which followed.

The second state institute was held at Lansing during the week commencing July 8, 1878. In issuing the call for this institute, Superintendent Tarbell said: "It has a double object,—first, for the convenience and instruction of teachers in the public schools of the State, who can avail themselves of the

advantages of an institute at this season of the year; and second, to bring together for mutual improvement those who are to do institute work in the State during the summer and fall. It is intended, so far as practicable, to make this institute the model on which the institutes of the coming season shall be formed. Michigan men only will be employed to give instruction, and, so far as feasible, only those who are expected to work in other institutes. Seventeen men, well known in the institute field, are engaged to give instruction, each one of whom will show how institute work upon the particular topics assigned to him should be done." This institute enrolled one hundred and thirty-six of the best teachers of the State, and was especially valuable to the instructors, who thereby had an opportunity of comparing views as to the best methods of presenting the different topics usually considered in county institutes. Each afternoon, after the regular session, the instructors met with the Superintendent of Public Instruction and discussed, in an informal manner, the work of the day. Committees were appointed to prepare outlines on each of the different topics considered, and these were printed for use of instructors in county institutes.

The third state institute was held at Lansing, July 9, 10, and 11, 1879, under the direction of Superintendent Gower. At this institute a number of the most experienced and successful institute workers of the State presented outlines upon the different topics usually considered at our county institutes. Each instructor was requested to give his reasons for the matter and arrangement of his outline, with suggestions as to the best way of presenting the different points to an institute. In addition to the discussion of each outline as it was under consideration by the institute, the instructors were requested to note any points wherein their own views differed from those expressed by the gentlemen presenting the various topics. These outlines were then revised by a committee and afterward published in the form of a manual for use at the county institutes during the succeeding two years, and thus a uniform basis of work was established, which has since rendered the instruction of far more value than could have been secured in any other way.

The value of teachers' institutes can hardly be over-estimated. Year by year they are becoming more valuable as their legitimate work is better understood. They have become a powerful agency in educating teachers who have no better way of obtaining normal instruction, and in educating public sentiment; and thousands of teachers every year go out from these discussions and instructions with clearer views of their respective duties; with a determination to do better service in the future, and with a higher inspiration for their calling.

The following table has been prepared in order to exhibit the number of institutes held each year since the first act providing for their support was passed, the number enrolled in attendance, and the amount of funds drawn from the State Treasury and the several county treasuries for meeting expenses incurred:

YEAR.	No. of Institutes.	No. Enrolled in Attendance.	Amount of Funds Disbursed.		
			State.	County.	Total.
1855	6	588	$1,200 00		$1,200 00
1856	9	913	1,800 00		1,800 00
1857	9	*	1,800 00		1,800 00
1858	†	†	1,200 00		1,200 00
1859	10	1,242	1,590 00		1,590 00
1860	8	1,251	1,300 00		1,300 00
1861	8	1,041	740 00		740 00
1862	13	1,850	1,385 00		1,385 00
1863	11	1,500	1,100 00		1,100 00
1864	13	1,209	1,300 00		1,300 00
1865	8	*	900 00		900 00
1866	11	902	1,100 00		1,100 00
1867	10	*	1,100 00		1,100 00
1868	7	*	1,400 00		1,400 00
1869	18	1,833	1,800 00		1,800 00
1870	16	2,005	1,800 00		1,800 00
1871	16	1,432	1,500 00		1,500 00
1872	17	1,275	1,800 00		1,800 00
1873	7	705	700 00		700 00
1874	13	890	1,300 00		1,300 00
1875	1	37			
1876	8	599	900 00		900 00
1877	20	781	1,503 73	$441 90	1,945 63
1878	46	2,862	1,545 00	3,902 83	5,447 83
1879	57	4,144	1,748 46	5,313 03	7,061 49
1880	65	4,482	1,800 00	6,667 49	8,467 49
Totals	407	31,541	$34,312 19	$16,325 25	$50,637 44

*Not reported. †No institutes held.

III. PEDAGOGY IN THE STATE UNIVERSITY.

Agreeably to recommendations of President James B. Angell and the faculty of the literary department of the State University, the Board of Regents, at a meeting held in June, 1879, established a chair of the science and the art of teaching, and elected William H. Payne, who, for a number of years previously had been the efficient superintendent of schools at Adrian, as professor to fill the same. The purposes of this new branch of university work, as given in the circular of announcement, are as follows:

1st. To fit university students for the higher positions in the public school service. It is a natural function of the University, as the head of our system of public instruction, to supply the demand made upon it for furnishing the larger public schools with superintendents, principals, and assistants in high schools. Year by year these important positions are falling more and more into the hands of men who have received education in the University. Up to the establishment of this professorship, the training of graduates who were to enter the public school service had been almost purely literary; they had not studied that special body of doctrine which can alone give to teaching the rank and character of a profession, and thereby make it a truly rational art.

2d. To give a more general diffusion to educational doctrines. The branches of knowledge most fit for university culture, are those which are most comprehensive, and which involve human interests of the highest order. Horace Mann has said: "In its largest sense, there is no subject so comprenensive as that of education. Its circumference reaches around and outside of, and therefore embraces, all other inter-

ests, human and divine." "No rational idea," says Herbert Spencer, "can be put forward for leaving the art of education out of our curriculum, whether as bearing upon the happiness of parents themselves, or whether as affecting the characters and lives of their children and remote descendants, we must admit that a knowledge of the right methods of juvenile culture, physical, intellectual, and moral, is a knowledge second to none in importance. This topic should occupy the highest and last place in the course of instruction passed through by each man and woman. * * * * The subject which involves all other subjects, and therefore the subject in which the education of every one should culminate, is the theory and practice of education."

3d. To promote the study of educational science. There are three well marked phases of thought with respect to fitness for teaching: *a*, the earliest conception, and the one that is the most prominent in the legal requirements for obtaining a license to teach, is that general scholarship constitutes fitness for teaching; *b*, a progressive phase of thought, marked by the establishment of normal schools, asserts that general scholarship supplemented by a knowledge of specific methods, constitutes fitness for teaching; *c*, the conception now gaining ground is that teaching should cease to be an empirical art and should become a rational art; that the teacher should not only be instructed in processes, but should also be taught the body of doctrine that underlies them and assures their validity. In other words, the art of teaching has outgrown its empirical stage, and is now growing into its rational or scientific stage. This phase of thought is indicated by the general movement, especially in the Northwest, to make the science of education an established branch of university instruction. As this is one of the latest of the sciences it has not yet been cast into articulate form. In fact it is now in process of formation. The materials exist in abundance, but these await selection and organization. The duty of the university is to discover as well as to teach; and for the present those who occupy chairs of education in our higher institutions of learning must devote a considerable share of their attention to the formation of a body of educational doctrine.

4th. To teach the history of education. The history of an art enables us to take stock of experiments and experiences, and to determine the direction and rate of progress. Experience has already settled many questions in the practice of education; and the history of what has been done in this line of thought and action is an indispensable preparation for giving form to the education of the future.

5th. To promote the transformation of teaching from an occupation to a profession. The typical professions are attractive to men of genius and culture because they offer to them the hope of a career—a field for the exercise of their highest intellectual attainments. But the very basis of professional activity is an articulate body of doctrine, in the application of whose principles to the solution of specific problems lie the inspiration and charm of a professional life. The source of the teacher's strength, and the very condition of his happiness and progress, is a body of scientific truth by which he may test the validity of his methods. Whether teaching be a handicraft or a liberal art depends on the absence or the presence of the scientific spirit.

In a branch of university work so essentially new, in which but little help could be derived from tradition and precedent, the initiatory work has necessarily been tentative and incomplete. The policy persistently followed has been to move cautiously and therefore slowly; to determine the work of the chair in its essential outlines; to give it an organization which will permit it to grow; and to leave the working out of details to experience, reflection, and leisure.

At the opening of the session of 1879–80, two courses of instruction were offered, as follows: 1. *Practical,* embracing school supervision, grading, courses of study, examinations, the art of instructing and governing, school architecture, school hygiene, school law, etc. 2. *Historical, philosophical, and critical,* embracing the history of education, the comparison and criticism of the systems in different countries, the outlines of educational science, the science of teaching, a critical discussion of theories and methods.

During the year 1879–80 seventy-one students have availed themselves of the instruction given in the science and the art of teaching, and many hopes are entertained that this department will be a source of much profit and advantage to the educational system of the State.

IV. MISCELLANEOUS.

In addition to the means provided by the State and state institutions for the professional training of teachers, nearly if not quite all of the denominational colleges have established normal departments of instruction, which are well attended and in which much excellent work is accomplished. In several of these institutions able and experienced instructors are employed, who, as specialists, devote their undivided attention to the preparation and training of teachers for the public school service.

There have also been established training schools for teachers in connection with several of the graded school systems of the State, whose especial work has been to prepare teachers for the common schools of the cities in which they are located. Previous to the establishment of these schools many of the teachers employed in those cities were but just graduated from the high schools, and they entered upon the responsible and delicate duties of teaching with no special training for the work, and with no certainty that they possessed any qualifications for teaching beyond a limited scholarship. Whether they had tact to manage, or aptness to impart instruction was unknown, and had to be determined after they had been placed in charge of a school. The learning process was often a painful one to teacher and school, and sometimes disastrous to both. The training school aims to prevent this double evil by removing its possibility. A four-room building is usually taken for this purpose, at which pupils in the four lower grades are placed. This school is under a special principal, and each pair of rooms is in charge of a critic-teacher, making three regular teachers for the four rooms. The persons who are preparing to teach recite in certain branches of study with the other high school classes, and receive special instruction in methods of teaching from the superintendent and principal. They also teach at stated times in the four rooms of the training school under the supervision of the principal and critic-teachers, thus securing a practical knowledge of teaching and managing, which theory alone could never impart.

Besides the provisions heretofore mentioned for the special training of teachers, a large number of the public high schools have for a number of years organized teachers' classes, which are maintained for a limited period each year, and at each of which a considerable number of persons who are preparing to teach attend. Although persons who avail themselves of the privileges afforded in these classes do not have an opportunity to engage in practice teaching to any extent, yet they obtain many excellent ideas of the work from the instruction given, and, by a general review of the subjects they will be called upon to teach in the schools where they may be employed, they are much better prepared for duty than had they not attended such classes.

In nearly all the graded school systems of the State, teachers' meetings are held at stated periods, at which many subjects pertaining to the duties devolved upon teachers are discussed, and, as a consequence, much benefit is derived therefrom by the teachers employed in those systems.

In this connection, teachers' associations might be mentioned, since they have ever been an important factor in elevating the professional standard of teaching; but as it has been deemed best to speak of these associations,—and especially of the State Teachers' Association,—in an extended manner elsewhere in these sketches, further notice of them is omitted here.

EDUCATION IN CHARITABLE, REFORMATORY, AND PENAL INSTITUTIONS.

No state would cite, as a recommendation to favor, the fact of being under the necessity of maintaining institutions of a charitable, reformatory, and penal character. But as there is no known civilized state where such necessity does not exist, an outline of the structural formation of the social life of any state which should not recognize such necessity would be incomplete. And the state itself would be incomplete in so far as it failed to make the best possible provision to meet such necessity. Those for whom such institutions are provided may be separated into three classes: the infirm, the criminal, and the indigent and unprotected. In the first class are the lunatic, the idiotic, the blind, and the deaf and dumb; in the second are all the subjects of criminal or police laws; and in the third may properly be placed the orphans and the paupers. All of these taken together make what is defined as the *dependent class.*

From the fifth biennial report of the State Board of Corrections and Charities, we learn that the number of persons either wholly or in part supported by the State and counties, for the year ending September 30, 1879, was as follows:

Indigent and unprotected:		
Number in county poor-houses	7,806	
Number of permanent paupers outside county houses	1,950	
Number temporarily relieved outside county houses	34,701	
Number of children in the State Public School at Coldwater	419	
		44,876
Infirm:		
Number of deaf-mutes and blind in Institution at Flint	259	
Number of insane in Asylum at Kalamazoo	716	
Number of insane in Asylum at Pontiac	492	
Number of inmates of Harper Hospital at Detroit	28	
		1,495
Criminal:		
Number in Reform School at Lansing	423	
Number in Detroit House of Correction	1,794	
Number in State House of Correction at Ionia	329	
Number in State Prison at Jackson	1,074	
Number in county jails	7,785	
		11,405
Total number of public dependents		57,776

There is a deduction to be made from these figures to the extent to which they may have been duplicated by the removal of prisoners from jails to other prisons; and also for a portion of the patients at the insane asylums, who are not supported at the public charge. The whole number of these, as nearly as *can* be ascertained, is about 1,500, thus leaving an aggregate of 56,276 persons

in whole or in part maintained by the State. Of the persons enumerated in the above table, the number of the indigent temporarily relieved outside of the county poor-houses, and the number of persons in county jails may be regarded as constituting a temporary or floating population. Nevertheless, as the same numbers return each year with a gradual increase, they become, in fact, a permanent body partially charged upon the State. Putting these aside, however, there are remaining no less than 13,790 persons who are under the permanent care of the State. For all this vast body there are no hopes for any restoration to a healthy moral or physical life, except in what is generally known as *education*. If the defects of nature are to be supplied, as in the case of the deaf and dumb, or the conscience quickened, as in the case of the criminal, it is always by some kind of *education*, either moral, intellectual, or physical, that the cure or the reform is accomplished. It becomes, then, a question of great importance whether to all or to which of these classes, and in what modes education can be applied.

In examining the various forms of infirmity, want, or crime, insanity seems to be the only one to which education, as commonly understood, cannot minister. And yet a certain form of education is applied even to lunatics. This is the education of discipline and amusement. In the care extended to this unfortunate class, Michigan is not behind any of her sister states of the Union. Leaving this class, however, out of view, there are still 12,582 of the deaf and dumb, blind, orphans, criminals and others who are the proper subjects of education. The next question is: How far has the State provided for them, and what measures have been taken for their instruction?

In conformity to an advanced public sentiment, which within the past few years has manifested itself in the United States and in Europe, the Legislature of Michigan, in 1871, passed an act "to provide for the appointment of a board of commissioners for the general supervision of penal, pauper, and reformatory institutions, and defining their duties and powers." The object of the act was the betterment of the condition of these institutions and of their inmates, through a reformed and more systematized management. The law gives to this board of commissioners supervision not only of state institutions, but of local poor-houses, asylums and jails.

I. STATE PUBLIC SCHOOL FOR DEPENDENT CHILDREN.

In the year 1870, a commission appointed by the Governor for the purpose visited many of the poor-houses in the State, and found a large number of children in them, under sixteen years of age, indiscriminately associated with idiots, maniacs, prostitutes, and vagrants. Their report recommended the classification of paupers, and especially, that children in the county houses, under sixteen years, should be placed in a state school. The act establishing the School was passed in 1871, in conformity with the recommendation. As amended in 1873, it provides, in substance, that there shall be received as pupils in such school all neglected and dependent children that are over four and under sixteen years of age, and that are in suitable condition of body and mind to receive instruction, especially those maintained in the county poor-houses, those who have been deserted by their parents, or are orphans, or whose parents have been convicted of crime. It is declared to be the object of the act to provide for such children temporary homes only, until homes can be procured for them in families. The plan comprehends the ultimate care of

all children of the class described, and it is made unlawful to retain such children in poor-houses, when there is room for them in the State Public School. Dependent orphans, or half orphans of deceased soldiers and sailors, have the preference of admission should there be more applications than room. Provision is made for preserving a record of the parentage and history of each child.

The organic law of the School appropriated $30,000, and the citizens of Coldwater donated the site and $25,000 to secure the location of the institution in that city, where the commissioners located it by reason of such donation and the suitableness of the place. A further appropriation was made in 1873, and the buildings were completed and occupied in May, 1874. The present estimated value of grounds, buildings, apparatus and other property belonging to the School, is $190,000.

The buildings are on the congregate and cottage plan combined, there being the main buildings and wings, in which are the superintendent's residence and office, dormitories for the matron, teachers, and other employés, the school-room in the wings, the dining room and kitchen in the rear projection, and the store-rooms, work-rooms, shoe-shop, sewing-room, laundry, engine and boiler room, etc., in the basement, which extends under all the main building and wings. In the rear of the main building, and connected with the same by a covered passage-way, are the nine cottages for about thirty children each, who are in charge of a lady cottage-manager in each, whose duties are similar to those of a mother with a smaller family. The capacity of the school can be increased by the addition of cottages only. The children are taught the common English branches, as in our district schools. So far as their age will permit, they are taught how to work—the boys on the farm of forty-one acres, in the garden, in the shoe-shop, and to make their own clothing. The girls assist in making their clothing, do housework, etc. Special effort is made to cultivate in the children industrial habits. Life in this institution, with a good school, moral and religious training, wholesome food, comfortable clothing, kind treatment with good discipline, soon produces excellent effects upon these children. The "poor-house look," so apparent in many when first admitted, with the tendency and almost longing for the old vagrant life with some, soon passes away, and their cheerful, healthy appearance, their proficiency in their work and in their school, make them compare very favorably with the same number of children attending our district schools. Their moral culture has proper attention, as required by law, both in cottages and school-room, and religious services are held for the children each Sunday in the chapel, conducted by the superintendent, and assisted by ladies and gentlemen from the city, representing various religious denominations. The older boys, often fifty at one time, in charge of some teacher or manager, attend service in some one of the city churches.

The children entitled to admission are those of sound mind and sound body under sixteen years of age, that are dependent on the public. Until the buildings have a capacity for all such in the State, the admissions to the School are divided *pro rata* among the counties in proportion to the number in each that that admissible. They are sent here by the superintendents of the poor, on the decision of the judge of probate of the county where they belong. On the child's being brought before the judge with the certificate of the superintendents of the poor, that in their opinion the child is dependent, he hears testimony tending to show the child's condition, and if he considers it dependent, the child is sent here with a copy of the decision and an abstract of the evidence;

which paper forms the basis of the child's history, which is kept upon the records of the institution. The law requires the Board of Control to place the children in good family homes as soon as practicable.

The Board has power to appoint an agent of the School, to have charge of this work. There is also an agent in each principal county, appointed by the Governor, charged with the duty of finding good homes, and supervising the children after indenture. All such indentures contain a clause reserving the right in the Board to cancel the same, and re-take the child when its good requires it. No child can be indentured unless the state agent, and the agent of the School (who is now the superintendent) decides the proposed home to be a proper one. The whole career of the child during minority, is carefully watched over, and all of its interests zealously protected by the State as by an own parent.

The institution is in charge of a Board of Control appointed by the Governor and confirmed by the Senate, each member whereof holds for a term of six years. At this date, this Board consists of James Burns, of Detroit, President; C. D. Randall, of Coldwater, Secretary and Treasurer, and Isaac A. Fancher, of Mount Pleasant. This Board has quite full discretionary power. It establishes the system of government for the School, engages all employés, and fixes their salaries, on approval of the Governor. The more direct management is in the resident superintendent, to whom are delegated large discretionary powers, and with whom principally rests the responsibility of success. The present Superintendent is Mr. Lyman P. Alden, a collegian, and successful business gentleman.

The accommodations of the School are for 300 children. The whole number received since the opening, in 1874, is 944. Of these, 525 have been placed in families; 82 returned, for various reasons, to the counties whence they came; six have been sent to the Reform School; five have absconded, and 34 have died; leaving 292 in the School September 30, 1880.

The School has no endowment, and is wholly dependent upon appropriations by the Legislature, and to the credit of the Legislature it may be said that the interests of the School thus far have never suffered for lack of means.

The following table will show the amount of moneys received each year from the State Treasury on account of legislative appropriations:

YEAR.	Legislative Appropriation.	YEAR.	Legislative Appropriation.	YEAR.	Legislative Appropriation.
1872	$36 65	1875	$52,440 00	1878	$43,900 00
1873	36,513 43	1876	44,450 00	1879	50,250 00
1874	51,450 92	1877	56,025 00	1880	36,700 00
Total appropriations					$371,766 00

So far the State Public School has been very successful, and appears to give satisfaction to the people as a very useful agency to save dependent children to a better life, and to decrease pauperism and crime.

For many generations in this country, and in Europe, governments have treated dependents so that pauperism, crime and consequent taxation have increased with the accumulation of wealth, more rapidly than the increase of population. The higher civilization became developed the more misery and

degradation was there in the lower classes. In England the ratio of dependents to the population for many years has averaged about one in twenty. In the United States, by the census of 1870, it was one in 332, and in Michigan, by the same census, one in 462. This condition in England has been reached under the old system that provides only for children after they become criminals. In this country, under the old system, with an overcrowded population, we may acquire all of England's burthen of pauperism and crime. It hence becomes a serious question for legislators and social scientists, whether by the Michigan educational preventive system America may not be saved from such dangerous complications as have often occurred in England on account of the lamentable condition of her pauper and criminal classes.

This scheme of a State Public School for dependent children is believed to have inaugurated a new era in educational and preventive work. It is receiving the careful consideration of scholars in social science, and legislators at home and abroad, who, with us, are hoping it may prove a very useful agency, created by the social necessities of the age to develop and maintain the purity of the race.

II. MICHIGAN STATE REFORM SCHOOL.

Governor Andrew Parsons, in his valedictory message to the Legislature of 1855, said: "I believe it to be the duty of the Legislature to establish a house of correction for juvenile offenders. There are many children of tender age, when they are easily tempted and cannot estimate the enormity of crime, who are induced to commit offenses which send them to the county jails or State Prison, among hardened offenders, where they are likely to learn more evil than good. Many of these, if confined in a proper place—trained to habits of industry, and properly taught the error of their way, and their duties, while yet young, would come out prepared to shun temptation, and to make good and useful citizens. It is enjoined upon the parent that he train up his children in the way they should go. If the State assumes to take the charge of children away from their parents, or to take charge of orphan children, it should not treat them as men of understanding and hardened in iniquity, but as a parent, train them up in the way they should go, in the hope and trust that when they become old many of them will not depart from it."

Governor Kinsley S. Bingham, in his inaugural message to the same Legislature, said as follows: "The presence of several boys and youth among the more hardened criminals in the State Prison, induces me to urge upon your attention the propriety of establishing a house of refuge or correction, where a milder course of treatment, more especially adapted to their reformation, can be employed. The State has not discharged its duty to these unfortunate victims of ignorance and temptation, until it has made provision by a proper system of discipline, for their instruction in useful knowledge, morals and piety—taught them some mechanical trade or other proper employment, and prepared them, upon their release from confinement, to become good citizens and useful members of society, as they return to its duties and privileges." In response to the foregoing recommendations of the retiring and in-coming Governors, the Legislature by an act, approved February 10, 1855, provided for the establishment of a "House of Correction for juvenile offenders," "at or near Lansing in the county of Ingham. *Provided*, That a suitable piece of land of not less than twenty acres, shall be donated for that purpose." A

plat comprising about thirty acres, situated in the eastern portion of the city, at the terminus of Shiawassee street and fronting westward on Pennsylvania avenue, was donated by the citizens of Lansing, and 195 acres adjoining the same, were subsequently purchased by the State.

The building was first opened for the reception of inmates September 2, 1856, and from that time to the date of the last annual report—September 30, 1880, there have been 2,312 commitments, of whom 2,134 were white boys, 166 colored boys, four Indian boys, and eight were girls. The Senate committee on House of Correction at the session of the Legislature of 1859, recommended that the name of the institution should be changed to "The State Reform School," urging as a reason therefor, "these lads will go forth in due time, or it is hoped the greater portion of them will, thoroughly reformed in character, and prepared for the responsibilities of life, with far less stigma resting upon them as having been educated at a reform school than at a house of correction." In accordance with this recommendation, the Legislature, by act approved February 12, 1859, changed the name to the "Michigan State Reform School." The management of the institution was originally vested in a board of six commissioners, two being appointed by the Governor and confirmed by the Senate, at each biennial session of the Legislature. By an act approved February 10, 1857, the management was committed to a "Board of Control," consisting of three members, the terms of service and manner of appointment being the same as before. By the law of 1855, offenders under the age of fifteen were to be sent to this House of Correction, and those between the ages of fifteen and twenty might be sent, if the court before whom they were convicted deemed them fit subjects for the institution. They were sent for definite terms by the circuit judges, police judges and justices of the peace. The law of 1857 provided that those guilty of prison offenses under the age of sixteen, should be sentenced to the House of Correction till twenty-one years of age. The law provides that the Board of Control may in their judgment place in families, or indenture as apprentices, any boys, who are in their opinion sufficiently reformed; or may return them to their parents, requiring—should they deem it necessary—security for their future good behavior and care.

By the act of March 16, 1861, the limits of age for commitment to the institution were established at seven and sixteen, and by the act of March 27, 1867, the limit was confined between the ages of ten and sixteen.

By act approved April 28, 1877, it was provided that all boys committed to the institution, except for offenses punishable by imprisonment for life, should be sentenced to the Reform School until they reach the age of eighteen years, or until discharged by law.

The first Superintendent of the institution was Theodore Foster, who was also one of the first board of commissioners appointed under the act of 1855. He resigned the position July 1, 1860, and was succeeded by Rev. Danforth B. Nichols, who held the office for the term of one year, and was succeeded by Cephas B. Robinson, who had previous to his appointment, been the assistant superintendent.

Mr. Robinson retained the position until his death, which occurred August 27, 1866. The institution was then under the care of assistant superintendent James H. Baker, until the appointment, November 16, 1866, of Rev. O. W. Fay, who soon after resigned, and Rev. Charles Johnson, a former teacher and assistant superintendent, appointed, who continued in office until April 1, 1875,

when he was succeeded by the present incumbent, Frank M. Howe, then assistant superintendent.

The institution has gradually changed from the nature of a prison, which its former name indicated—with its grates and bars, high fence and locks, to a school with no prison-like surroundings. The play ground, containing some three acres, was formerly enclosed by a very high and unsightly fence; this has been removed, and a neat picket fence substituted. The gratings have been removed from the windows, and the locks upon the doors are now only used to protect the institution from nocturnal visits of burglars and tramps.

The principal punishment employed for the refractory, is a system of demerit marks, or deprivation of some enjoyment which the better boys may indulge in; corporal punishment is seldom required, and is resorted to only in extreme cases. The boys show no disposition to abuse the confidence thus reposed in them, and attempts to escape from the institution are exceedingly rare and confined almost entirely to boys who have not been in the institution long enough to derive the benefit intended to be conferred upon them by its system of discipline.

The center building of the house proper fronts to the west forty-eight feet feet, is fifty-six feet deep and four stories high; there are wings extending to the north and south, each ninety-five feet long, thirty-three feet deep, and three stories high, with towers at the extremities four stories in height. The north wing extends to the east eighty-three feet, forming an L; is thirty feet wide and three stories high. On the ground floor of the centre building are a dining-room and kitchen for the officers, and a storeroom and laundry; on the second floor are the office, reception room, family dining room and guest chamber; on the third floor are rooms for the officers and employés, and on the fourth floor, the chapel, suitably arranged, and capable of seating three hundred persons. On the first floor of the north wing are the dining rooms for the boys; on the second floor the art gallery and rooms for employés, and the upper portion is occupied for dormitories, arranged with separate sleeping apartments for the boys.

In the basement of the south wing is the bath or wash-room; on the first floor are the school-rooms and the tailor shop; on the second floor additional school-rooms and the library, and sleeping apartments on the fourth floor.

In the basement of the east wing are the laundry. store-room and cellar; on the first floor, the boys' kitchen, bakery, ironing-room and shoe-shop; the second floor contains the hospital and bed-rooms, and the upper portion is devoted to sleeping apartments for the boys.

At short distances north and south of the main building, and fronting to the west, are the two family houses, each forty-two by fifty-two feet, two stories in height with a Mansard roof, and like the main building, built of brick. Each of these houses contain suitable apartments for an overseer and his family, with accommodations for a large number of boys, who are placed here as a reward for good conduct.

A third cottage building, more commodious and of finer appearance and proportions than the former two was completed in 1879, and is principally devoted to school-rooms and dormitories.

The shops are located on the northeast portion of the yard, and occupy a substantial brick building, three stories in height, one hundred and forty-six feet long, and fifty-two feet wide, suitably arranged and provided with machinery for the employment of the inmates.

The buildings are all heated by steam supplied by boilers connected with the workshops. An abundance of excellent water is supplied the institution by means of an artesian well upon the premises; this well has been sunk to the depth of six hundred feet, one hundred of which is piped to exclude the surface water.

The farm, which has been greatly improved of late by the labor of the boys, under the direction of the Superintendent, is all under cultivation and pasturage, and has for its use a large barn forty-eight by sixty feet, upon a substantial stone foundation, with cellar; also with sheds for stock, wagons, and farm implements, horse-barn, piggery, and all the customary out-buildings and conveniences required or usually found upon a well regulated farm.

The Board of Control, composed at present of D. B. Hale of Eaton Rapids, Chairman; E. H. Davis of Lansing, Treasurer; and Geo. A. Smith of Somerset, Clerk, has charge of all matters pertaining to the general welfare of the institution.

The boys rise at five and one-half o'clock in the morning from April to October, and during the remainder of the year at six, and retire at eight, giving them nine hours and a half for sleep in the summer and ten hours in the winter. Each boy, unless incapacitated by sickness, is required to work five hours each day, attends school five hours and a quarter, and one hour military drill, and the remainder of the time—from two and three quarters to three and a quarter hours—except while at meals, is devoted to play and recreation.

The term of confinement—if a residence at the school may now be properly so called—depends mainly upon the deportment of the inmates, and consequently is of unequal duration.

By the operation of law, all boys are sent to the institution to remain there until they complete their eighteenth year, but the same law provides that boys who by uniform good conduct give the best evidence of reformation, may be sooner discharged, and that bad and incorrigible boys, upon whom the reformatory influences have failed to effect an improvement, and whose continuance in the school is deemed prejudicial to its management and discipline, may be returned to the court which issued the commitment, for such disposition as to such court may appear proper.

While it is believed that a great improvement is wrought in the cases of a large majority of the boys committed to the institution, and that many go forth from it to occupy positions of usefulness and respectability in society, it cannot be denied that in some cases boys who have been sent here, and discharged in consequence of good conduct, eventually find a place in the House of Correction or State Prison, and to explain why this is so, or to prevent it, would require more than the wisdom or potency of man. Few boys are discharged from the institution who have not been there at least a year, and to secure a discharge in so short a time requires the most exemplary behavior and attention to rules and regulations. No distinction is made on account of differences in birth or color. All are on an equal footing, and good behavior is the only password which will allow an inmate to go free from the door. Where a boy has no home to return to,—or, worse than that, a home presided over by intemperate and criminal parents, he is retained at the institution, even after he has given the most abundant assurance of his reformation, until a suitable home can be found for him where the Board of Control are satisfied his education and religious training will not be neglected.

The labor of a large number of the inmates is required to supply the wants of the institution; many of the boys are employed upon the farm, others in the tailor and shoe shops, manufacturing clothing and shoes for themselves and companions, others in the laundry and kitchen, and others in such branches of industry as the Board can find a market for. The manufacture of cigars for several years gave employment to a large number of boys, and assisted materially in paying the current expenses of the institution, but the contractors for this class of labor discontinued the same at the close of the year 1875, and the only work for which there is any demand at present is the caning of chairs. The introduction of such labor as will benefit the boys by acquiring a knowledge of its operation, and at the same time relieve the tax-payer to some extent, of the burden of supporting the institution, has been the object of much study and inquiry on the part of the Board of Control of this and kindred institutions, and the problem still remains unsolved.

The number of inmates at the commencement of the last fiscal year, October 1, 1879, was three hundred and seven; during the year one hundred and seventy-seven were admitted, and one hundred and sixty-eight were discharged, as follows: One hundred and thirty-six were discharged as reformed and returned to their homes, fourteen were returned to their parents to reside out of the State, ten were discharged on ticket-of-leave, for six places were found with farmers, and two escaped, leaving three hundred and sixteen in the institution, September 30, 1880.

The library contains upwards of three thousand volumes of books, carefully selected and suited to the wants and tastes of the boys. The privileges of the library, reading room, and art gallery,—the latter containing a large number of paintings and engravings, the most of which have been generously donated to the institution, besides a collection of house plants and other attractions, are highly prized and appreciated by the boys, and many hours are here pleasantly and profitably employed that otherwise might be devoted to what is not very uncommon with boys of like ages,—planning or perpetrating mischief.

The farm is well stocked with horses, cattle and swine. The horses are employed upon the farm, and draw to the premises all supplies purchased, besides delivering manufactured work at the railroad depots. The cows supply all the milk required and a considerable revenue is derived from the sale of calves and pigs, while everything required for the sustenance of the stock is produced upon the farm. The benefits derived from the operation of the farm are varied and important. The productions of the soil, being consumed at the institution, save the large expenditure which their purchase would require, while a large number of the inmates are thereby supplied with healthful and respectable employment, and thereby prepared for a field of usefulness upon their discharge. In this connection it is proper to state that in some cases the boys have acquired such proficiency in the various branches of labor in which they have here been educated, that upon receiving their discharge they have been employed by the institution to carry on the work for which they have shown themselves so well adapted.

The estimated value of grounds, buildings, and other property belonging to the institution is $264,550. The School has no endowment, but depends upon legislative appropriations for support. The amount of these appropriations, received by the institution each year since its establishment, is shown in the following table:

YEAR.	Legislative Appropriation.	YEAR.	Legislative Appropriation.	YEAR.	Legislative Appropriation.
1855	$11,633 89	1864	$17,516 46	1873	$18,500 00
1856	13,362 81	1865	41,206 25	1874	34,400 00
1857	18,773 76	1866	22,483 54	1875	26,000 00
1858	15,000 00	1867	62,157 62	1876	28,500 00
1859	17,000 00	1868	44,787 68	1877	32,375 00
1860	27,174 90	1869	56,025 53	1878	26,500 00
1861	17,137 52	1870	36,626 95	1879	48,187 51
1862	20,181 76	1871	22,000 00	1880	36,500 00
1863	16,000 00	1872	51,000 00		
Total appropriations received					$761,031 18

A thorough investigation of the subject, a visit to the Reform School, and an examination of its conduct, of the boys in the school, in the work-shop or on the farm, in the chapel and on the play ground, the thorough system of order, regularity and discipline pervading the whole, the physical condition of the boys and the general appearance of contentment, cannot fail to impress the visitor with the wisdom of those who projected this great charity, and its successful working in every particular.

Each successive change in the office of superintendent has been accompanied by some good result; for each new incumbent, having before him the policy of his predecessor, and viewing both its advantages and its faults, has been able to introduce some new feature in the conduct of the institution which experience has demonstrated to be an improvement. The most important change, of stripping the institution entirely of its prison garb, has been effected by the present Superintendent, and its thorough trial for more than five years past has proved it a triumphant success.

III. REFORM SCHOOL FOR GIRLS.

At the annual meeting of the Michigan Woman's Christian Temperance Union, held in Grand Rapids in 1878, Mrs. Mary T. Lathrop of Jackson presented a paper on "Fallen Women," which by unanimous vote was ordered printed for general circulation. A committee was also appointed to prepare and present a memorial and petition to the Legislature asking an appropriation for a house of refuge for fallen women and girls. Mrs. Mary T. Lathrop of Jackson, Mrs. I. G. D. Stewart of Detroit, and Mrs. E. P. Church of Greenville were appointed to constitute such committee. In accordance with this action, the committee immediately entered upon the work assigned it by the printing of petitions, and of a circular letter of directions for their use. These were sent to all auxiliary unions and to many not auxiliary, and were circulated with zeal and faithfulness. There was never, probably, a memorial placed before the general public for signatures, received with such warm approval as this. Early in the session of the Legislature of 1879 these memorials began to fall around the members like autumn leaves. A few petitions on this subject came from other sources, asking for different methods, but largely the work for the cause was accomplished by the petitions and the labors of the temper-

ance women. As a result of the genuine interest that had been awakened several bills were presented by members of the Legislature in both the Senate and the House. Among these was one drawn up by the committee of ladies, and this one became the centre of legislative discussion and action. After considerable delay and much opposition from some who had rival bills in charge, the bill, as prepared by the ladies' committee, with some modifications, was passed by the House, and eventually by the Senate, May 22, and approved by the Governor May 31, 1879, thus becoming a law, and giving to Michigan a State Reform School for Girls.

This act provides that the sum of $30,000 be appropriated from the general fund, for purchasing and preparing the grounds, and the erection of suitable buildings therefor, and to pay the current expenses of the said Reform School. It also provides that "the general supervision and government of said Reform School shall be vested in a board of control to consist of four women and two men who shall be appointed by the Governor, by and with the advice and consent of the Senate."

January 3, 1880, the following persons were named by the Governor to constitute the Board of Control of the Reform School for Girls: Mrs. James F. Joy, of Detroit; Mrs. Samuel L. Fuller, of Grand Rapids; Mrs. C. B. Stebbins, of Lansing; Miss Emma A. Hall, of Flint; Hon. Charles T. Gorham, of Marshall, and Hon. William H. Waldby, of Adrian. Mrs. Joy declined to act, and the remainder constituted the Board until December, 1880, when Messrs. Gorham and Waldby resigned and Messrs. Charles R. Miller, of Adrian, and James McMillan, of Detroit, were appointed to fill the vacancies.

January 27, 1880, the Board of Control, upon call of Governor Croswell, met in the executive office at Lansing, and organized by electing Mrs. Samuel L. Fuller, President; Hon. W. H. Waldby, Treasurer; and Miss Emma A. Hall, Clerk. Measures were at once taken to secure a site for the School, and in April it was located in Adrian, whose citizens donated forty acres of farming land lying about one-half mile north of the city limits, and upon which was a farm house, two barns, and other out-buildings. In addition to this the citizens gave $3,000, to be expended in ornamenting the grounds, under the direction of the Board. Before proceeding farther, the Board visited a number of similar institutions, that they might, for their information and benefit, acquire an insight into the principles and practical working of such schools. The Board advertised for plans, also for proposals for the erection of the buildings. With alterations and curtailments, they accepted the plans offered by Mr. Mortimer L. Smith, of Detroit, and contracted with Mr. James Donough, of Adrian, to erect two cottages for the sum of $25,500, the buildings to be completed the first day of July, 1881.

In their first annual report, the Board of Control suggested "that the sum of $71,000 seems absolutely required to cover the expenses that must be incurred the ensuing two years;" also, "in order to grade the girls properly, and to provide for the number that will undoubtedly be sent to the School, as well as to afford proper school rooms and a chapel, the Board most respectfully ask the following appropriations: Building two additional cottages, with plumbing, heating, furniture, grading, fences, sewerage, and current expenses for one year, $50,000; one chapel and school building, with bell, furniture, heating, books, etc., $10,000, making a total of $131,000."

The State Reform School for Girls when completed will consist of a series of beautiful cottages, four in number, built of brick and trimmed with sand-

stone. They are to be of the same size and design. Each building will accommodate thirty girls, and will be under the management of ladies of known reputation in the treatment of wayward girls.

All inmates of the institution will have an opportunity to become educated and accomplished in all the arts of housekeeping. A portion of each day will be set apart for study, sewing, laundry, baking and such other work as will fit the girls for useful lives as wives, mothers and housekeepers.

The place selected for the buildings, one mile northwest of the city of Adrian commands a fine view of the city. The grounds will be beautifully laid out and cultivated by the inmates; the care of flowers and ornamental trees will constitute the outdoor work. A beautiful park of several acres of forest a few rods to the west will be fitted up to be used by the girls in common as a reward for good behavior. When this institution is completed it will be one of the finest in the United States, and Michigan one of the first of the states to put in operation a systematic course of treatment to save the young girls of our land from lives of shame, crime and misery. Girls without mothers will here find substitutes in the watchful care of kind Christian women. Vicious girls will be dealt with kindly but rigorously. Far better will it be to see our girls here surrounded by congenial, happy influences until able to resist the temptations they are subject to in our cities and towns than left to float out on an open sea of social vice.

IV.—INSTITUTION FOR THE DEAF AND DUMB.

The Constitution of the State of Michigan, adopted in 1850, provides that "Institutions for the benefit of those inhabitants who are deaf, dumb, blind, or insane, shall always be fostered and sustained." Previous, however, to this provision of the Constitution, and as early as April, 1848, the Legislature passed a law for the purpose of establishing the Asylum for the education of the Deaf and Dumb and the Blind, and the Asylum for the Insane. Both institutions, by that act, being put under the control of one Board of Trustees. This Board consisted of Elon Farnsworth of Wayne county, Charles E. Stuart of Kalamazoo county, Charles H. Taylor of Kent county, John P. Cook of Hillsdale county, and Charles C. Hascall of Genesee county. The first recommendation to the Legislature by this Board for establishing a school for the deaf and dumb and the blind, upon the combined plan, as finally adopted, of teaching all of them in the same institution, was made in January, 1851. And after the further maturing of their plans, the Board in January, 1854, appointed Rev. B. M. Fay as Principal, and his wife as assistant and matron. The institution was opened in February thereafter in a small building in the village, now city, of Flint, and received during the same month seven deaf-mutes and one blind girl.

Mr. Fay remained as Principal until September, 1864, when, on account of the ill-health of his wife, he resigned, and was succeeded by Egbert L. Bangs of New York. In May, 1876, Prof. Bangs, after a service of twelve years, covering the most eventful and successful period of the history of the institution, tendered his resignation. The same was accepted, and J. Willis Parker, who had been a teacher in the institution, was elected Principal *ad interim*, until the Trustees should be able to secure the services of some one whom they might deem it wise to elect as permanent Principal. At the close of the school year, in 1877, Mr. Parker, having performed the duties pertaining to the principal-

ship to the entire satisfaction of the Trustees, was elected Principal. In this position he continued until the summer of 1879, when he resigned to accept the principalship of the Kansas Institution for the Deaf and Dumb, and the Trustees employed as his successor, Thomas MacIntire, the present incumbent, who had been for twenty-six years the successful Principal of the Indiana Institution for the Deaf and Dumb.

As already noted, this institution and the asylum for the insane were originally placed under the control of one board, composed of five trustees. In 1857 the Legislature passed an act placing this institution under a separate board, consisting of three trustees, and from this regulation there has been no change since. The present Board of Trustees is composed of Charles G. Johnson of Monroe, President; James M. Neasmith of Vicksburg, Secretary; and James C. Wilson of Flint, Treasurer.

Previous to the year 1880 this institution was a school in common for deaf-mutes and the blind, rather from motives of economy than from any relation which the two classes, or the methods for their care and instruction bear to each other. The Legislature of 1879, however, passed an act providing for a separate school for the blind, and that class has within the past year been removed from the Institution at Flint.

The actual work of constructing buildings for the Institution was begun in 1853. The principal buildings of the Institution at the present time consist of the following: Front building 43 by 72 feet, with east and west wings, each 28 by 60 feet; central building 40 by 60, and east and west wings, each 50 by 70 feet; main school building 52 by 54, with two wings, each 25 by 60 feet. All of these buildings are four stories in height, except the center of the front building, which is five stories, including basement. The other buildings are: Boiler and engine-house, wash-house, dry-house, ironing-house, cabinet-shop, barn, pump-house, well-house, and other necessary outhouses. The estimated value of the property of the Institution, real and personal, amounts to over $440,000.

The industrial pursuits of the pupils are necessarily limited to few avocations, the principal of which are cabinet-making, shoe-making and willow work, and, not least, printing. For the latter purpose a fairly well appointed printing office is maintained, and a small weekly paper issued, which is widely exchanged with papers of similar kind from other institutions throughout the country, and also to a considerable extent with the general newspaper press in Michigan. This is a source of great interest to the pupils, and many of them, both boys and girls, learn to be good printers, and find employment as such when they go out from the Institution.

Tuition and board are free to all residents of the State, and the Trustees are authorized to assist indigent persons, in the way of clothing, etc., to the amount of forty dollars each per annum, which is charged back to the county to which the pupil belongs. Persons from without the State may be admitted upon payment of such amount as will cover their care and keeping. The county poor authorities are required to place all deaf and dumb persons under their charge, who are between the ages of ten and twenty years, and of sound mind, in the Institution. Official steps are taken each year for ascertaining the residence of deaf-mutes, and notifying their friends of their right to the benefit of the Institution. The attendance of any one person is limited to eight years.

The number of deaf-mute pupils that have been in attendance at the close of school for several years past is shown in the following table:

YEAR.	Number of Pupils.	YEAR.	Number of Pupils.	YEAR.	Number of Pupils.	YEAR.	Number of Pupils.
1865	94	1869	135	1873	153	1877	220
1866	109	1870	133	1874	183	1878	236
1867	116	1871	148	1875	196	1879	255
1868	119	1872	159	1876	212	1880	243

The Institution for the Deaf and Dumb has no endowment or invested funds, consequently it relies for its maintenance upon appropriations made by the Legislature. The following table exhibits the amount of such appropriations received by the Institution each year since its establishment:

YEAR.	Legislative Appropriations.	YEAR.	Legislative Appropriations.	YEAR.	Legislative Appropriations.
1850	$181 51	1861	$17,000 00	1872	$45,000 00
1851	105 73	1862	33,000 00	1873	40,063 00
1852	29 87	1863	23,500 00	1874	54,139 02
1853	662 49	1864	35,000 00	1875	45,022 83
1854	9,573 99	1865	36,000 00	1876	47,476 50
1855	17,654 21	1866	17,000 00	1877	46,170 90
1856	19,688 75	1867	44,500 00	1878	42,585 62
1857	32,999 41	1868	77,500 00	1879	43,398 49
1858	37,500 00	1869	81,500 00	1880	46,180 90
1859	22,000 00	1870	68,500 00		
1860	30,000 00	1871	50,000 00		
Total appropriations received					$1,063,933 23

V. MICHIGAN SCHOOL FOR THE BLIND.

As already noted in the preceding chapter no separate school for the blind was opened previous to 1880, but such unfortunates were provided for in the Institution for the Deaf and Dumb at Flint. In 1879 the Legislature passed an act making special provisions for a separate School, and authorizing the Governor to appoint three commissioners to act with himself for the purpose of selecting a suitable site and erecting thereon buildings for such School, and putting the same in operation. The sum of $30,000 was appropriated. The commissioners also had power to rent suitable buildngs or rooms to be occupied for the purposes of the School until the buildings provided for in the act should be completed and ready for the reception of pupils.

This act was approved May 31, 1879, and the commissioners appointed under date of September 19, 1879, in compliance therewith were John J. Bagley of Detroit, Townsend North of Vassar, and Tom S. Applegate of Adrian. October 16, 1879, the Commissioners held their first meeting at the Institution for the Deaf and Dumb, and the Blind at Flint, and organized as follows: President, Townsend North; Secretary, Tom S. Applegate; Treasurer, John J. Bagley. December 11, in consequence of the pressure of private business, John J. Bagley resigned from the Commission and on the 17th the Governor appointed Rowland E. Trowbridge of Birmingham, Oakland county, to take

the place on the Commission made vacant by such resignation. Mr. Trowbridge was also elected Treasurer by the Board in the place of Mr. Bagley.

No permanent location has, as yet, been fixed upon by the Board, and pending its decision as to such location and the erection of buildings, the Board has leased the former Odd Fellows' Institute at Lansing, and the October term of the School for the year 1880–1 has been commenced under the principalship of Prof. James F. McElroy, formerly of the Indiana State Institute for the Blind at Indianapolis. The School opened with thirty-three pupils, and, December 1, the number had increased to fifty-two, most of whom had previously been at the Institution at Flint. The Commissioners estimate from the applications on file, and the number of blind children in the State known to be entitled to the privileges of the School, that the number during the year will reach seventy-five, with the prospect of more in the year following.

VI. MISCELLANEOUS.

The State Prison.

First and principal among the penal institutions of Michigan is the State Prison, at Jackson, established there in 1839, during which year there were 35 convictions. During 1879, there were 270, the highest number being 408, in 1877. The sentences to this prison have diminished since that year in consequence of the opening of the Reformatory at Ionia, to which many of the younger class of convicts have been sent. The number of convicts remaining in prison, December 11, 1880, was 779. The average for the year ending September 30, 1880, was 813. The principal employments are the manufacture of wagons, agricultural implements, including polished steel forks, shovels, spades, rakes, etc., with their handles, boots, shoes, brooms, etc.

A department of education is established in the State Prison under the charge and supervision of Eugene M. Gardner, who has in his custody all prison property supplied for use therein; proposes all rules for the regulation of the internal concerns thereof, which rules, when approved by the Warden, govern all persons and in all matters within the scope of this department. The principal work of this department is the education of the convicts who may be, for the time being, inmates of the Institution, and the Superintendent is assisted in such work by the other officers of the Institution as they may be detailed for such purpose. Officers detailed as assistant teachers are required to use their best efforts for the advancement of the school. As an aid in this direction a teachers' class is organized by the Superintendent, the sessions of which are held at such times and places as he designates, and at each session of which all officers assigned as teachers habitually attend.

The course of education established for the prison-school covers three years of study, and embraces reading, spelling, writing, arithmetic, grammar, geography, United States history, civil government, physiology and hygiene, book-keeping, natural philosophy, and mental and moral philosophy.

There is a session of the school held each week-day evening, continuing three hours, during the months of October, November, December, January and February, and during the other months a less number of hours, as from time to time is determined.

State House of Correction and Reformatory.

Governor John J. Bagley, in a special message to the Legislature in Febru-

ary, 1873, devoted exclusively to the subject of the penal institutions of the State, had this to say:

The Reform School receives all boys convicted of any crime, between the ages of ten and sixteen. The Detroit House of Correction is, virtually, an intermediate prison, receiving all women and a large proportion of the young men convicted of crime. The State Prison is the custodian of all other convicted persons, excepting those who, for slight offenses, are committed to the county jail. It would seem as though with these three institutions we should be able to classify and grade the inmates, separating old from young, new beginners from old offenders, the ignorant from the vicious criminal, and thus prevent the demoralization that prison life spreads like a pall over all who suffer for crime.

But with these opportunities we are doing little better than we did years ago. In the Reform School we find the lad of ten the associate of the young man of sixteen, a quick scholar to learn vice from the ready reprobate who teaches it.

In the State Prison the young men of sixteen to twenty are the associates of old offenders and hardened criminals. According to the reports of the prison, nine-tenths of the convicts received each year are sent for their first offense; but once within its walls, whether young or old, whether convicted for a slight or a serious offense, whether the victim of intemperance, or of inherited bad influences, or vicious from choice, all are put upon a level treatment and condition. We would not treat our cattle on our farms in this manner. Our duty to these unfortunates and to ourselves compels us, at the earliest possible moment, to correct this. With the rapid growth of the State it will soon become necessary that either some city in the western portion of the State should do as Detroit has done,—build a House of Correction and make suitable arrangements with the State for the use of a portion of it, or that the State build an intermediate prison or house of correction. Were all the jails emptied of those who are under sentence in them (as they ought to be), it would be a necessity that this be done at once and without delay.

The wise suggestion of the Governor was promptly acted upon, and the result was the passage of a law providing for the establishment of a State House of Correction; and in conformity with the provisions of that law, a commission was appointed, which after visiting a number of cities, finally decided to locate the institution at Ionia,—the citizens having donated the land. Buildings were soon afterward erected, and the institution was opened for the reception of offenders, August 1, 1877.

The laws governing the institution provide for the appointment of a teacher and the maintenance of a school. Under this provision, DeWitt Chipman was appointed teacher, and entered upon the discharge of his duties, October 22, 1879. The work connected with this department is divided into two portions: a day school and a night school. The day school is held every afternoon, except on Saturdays, and is attended by all inmates not employed on contract work, or engaged on prison duties which require a full day's attention. The night school is attended by all inmates. Reading, writing, spelling, arithmetic, and oral drill in history and geography, make up the exercises. As to the progress made since the school was opened, the teacher, in his report for the fiscal year ending September 30, 1880, says: "It would be difficult to report the actual progress made by inmates in their studies, but I can say that there are many who came here totally ignorant of reading or writing who are now competent to read ordinary newspaper print, write their own names and cypher in simple numbers."

Detroit House of Correction.

This is not a state prison, nor state institution of any kind. The State has no direct interest in it, and only such general control of it as it has of county jails or municipal prisons of any kind. Yet the Detroit House of Correction is a penal institution of first-class magnitude, has a widely extended reputation for enlightened, successful management, and though excluding contract labor,

pays its way and earns a surplus each year. It usually contains nearly as many convicts as the State Prison at Jackson, and receives and discharges annually many more (owing to shorter sentences) than are received and discharged at Jackson.

The House of Correction was built and is governed by the city of Detroit, and the law of its organization was enacted by the State Legislature, and approved March 15, 1861.

This institution is among the very foremost of its kind in the country in the educational advantages afforded its inmates. The school is under the principalship of Dr. C. C. Yemans, the prison physician, and is conducted each evening except Saturday and Sunday, from 6 to 7½ o'clock. The women's department is under the direction of the matrons of the "Home;" while the men's department is conducted by the Principal, assisted by the officers, so far as discipline is concerned; but all instruction is given by the Principal and teachers selected from among the prisoners.

Private Charities.

Not least among the institutions that have been established in the State for the benefit of the dependent classes, are many private ones. Most of these are conducted by pains-taking and self-sacrificing women; in many cases connected with particular church guilds, and in many others without denominational character, but in nearly or quite all cases extending their aid and ministrations with broadest catholic philanthrophy, destitution alone being a sufficient reason for affording help. It would be a pleasure to note each of these separately, but not having the proper data at hand to give them a fair degree of attention, we can only refer to them in this general manner, leaving further mention to some future historian.

JOHN M. GREGORY.

STATE SUPERVISION.

I. LEGISLATION.

As early as 1833 the people of Michigan recognized the importance of having a special officer to supervise educational interests, and accordingly an act was passed by the Territorial Legislature in that year creating the office of "Superintendent of Common Schools." This officer was to be appointed by the Governor, and he was given authority to take supervision of the school lands and all fractional sections for the use of schools, where trustees or commissioners had not been chosen. The directors of districts were to report to the Superintendent the whole number of pupils taught in the district for three months, and any additional time, together with the amount of moneys received from the commissioners. It was made the duty of the Superintendent to report annually to the Legislative Council the number of pupils taught, the condition of the school lands, suits or actions brought, and moneys arising from this and other sources, and whatever else might to him appear necessary, concerning the lands and the condition of the schools. That this office was ever filled is now a matter of doubt, as we have been unable to find any record of appointment, or other document that would give light on the subject.

During the year 1835 the people of the Territory adopted a Constitution and formed a State government. At the Convention which framed this Constitution, the suject of education received careful consideration. A committee, of which Isaac E. Crary was chairman, was appointed to draft an article on public instruction. The committee reported on the second day of June, 1835. In the article reported provision was made for a Secretary of Public Instruction. When the article came up in Convention Judge Woodbridge remarked that he had read it, and although it was new and not to be found in any other constitution, yet he was inclined to give it his support, provided the word "Secretary," should be stricken out and the word "Superintendent" inserted. The change was accordingly made. The idea of the framers of the Constitution was to embrace the whole, and in one sense, a wider and different field of supervision than was embraced in the first law established under it—a wider, in all that pertains to the high and peculiar signification of public instruction; and different, in the absence of any connection of the Superintendent with the disposition of the lands, or management of the funds granted for the support of education. The Prussian principle upon which the constitutional provisions of Michigan were based, asserted the fact "that every state needs a separate officer of public instruction, and that there should be nothing to divert his attention from the general supervision of education." Under that system this officer devotes his whole time to schools and the subject of education. The creation of such an officer was intended in the adoption of our own Constitu-

tion. Its framers looked to this officer for a general supervision not only of primary schools, but of the University, of colleges, academies, high schools and all schools, established or to be established throughout the State. True, the government of these institutions was to be confided to the management and control of local officers, adapted to the character and wants of each—but over all, as representing the guardian watchfulness and interest of the State, was intended to be the general officer of public instruction, accumulating all the material of this congregated effort, and laying it in embodied form before the tribunal of the people and their legislatures; devising and maturing plans for improvement; requiring full information in every particular relating to the annual condition and progress of all these institutions; preparing suitable forms of procedure for the expeditious and correct transaction of business; suggesting the needs of the system, and perfecting its details where it was found to be wanting; giving his support to the labors of officers entrusted with the care of schools; impressing the importance of education by public lectures, and personal visitations in the various counties and districts; infusing life and zeal, and spreading information among all: showing the rewards of labor; and by the energy of his exertions, in common with others, and from advantage of position in acquiring knowledge, ensuring progression in all that relates to educational, intellectual and moral achievement.

In 1836 the first State Legislature met, and during the session an act was passed which provided, among other things, for the appointment of a Superintendent of Public Instruction. On the same day on which this act was passed, July 26, 1836, Rev. John D. Pierce was nominated for the office, and unanimously confirmed by both houses of the Legislature. To this gentleman was confided, by the act just referred to, the responsible duty of preparing a system for the common schools, and a plan for a university and its branches.

In 1837 Superintendent Pierce presented his first report, in which he made recommendations, among others, for a law defining the duties of the Superintendent of Public Instruction. These proposed duties were as follows:

1. To submit to the Legislature an annual report, exhibiting the condition of the university and primary school funds; also of the primary schools and of the University and its branches, and all such matters relating to his office and the public schools as he might think proper to communicate.
2. To prepare suitable forms for making all reports which might be required of the district, township, academic and university boards, and suitable regulations for conducting all proceedings under the law relating to public instruction, and to transmit the same with such instructions as he might deem proper for the organization and government of the public schools, with such directions as to the course of studies as he might judge advisable, to the several officers intrusted with their management and care.
3. To appoint the prescribed number of trustees and visitors in the the different academic boards, and the annual board of visitors to the University.
4. To take charge of all university and school lands and all other property reserved to the State for the purposes of education, and dispose of the same according to law.
5. To invest all moneys arising from sale of such lands and property as directed by law.
6. To apportion the income of the university fund among its branches and the parent institution, and also the income of the primary school fund among the several townships and cities of the State, on such principles as might be sanctioned by the Legislature.
7. To prepare annually a table of the amount to be paid to the University and each of its branches; also the amount in the aggregate to be paid to the different counties of the State from the income of the university and primary school funds respectively, and present the same to the State Treasurer.
8. To notify the treasurers of the several counties of the amounts to be disbursed.
9. To hear and decide all questions arising under the public school system.

This report was laid before the Legislature, January 5, 1837. February 18, the committee on education submitted a report concurring in the views presented by Mr. Pierce, and an act was subsequently passed, which gave to the Superintendent of Public Instruction the powers specified in Mr. Pierce's plan, with the exception of that which related to the decision of questions arising under the school laws.

These duties remained materially unchanged until 1844, when the State Land Office was established, and the control of school and university lands was transferred to that office. In 1846 the laws were revised and codified, and the prescribed duties of the Superintendent of Public Instruction consisted chiefly of the following: To submit annual reports to the Legislature; to cause the school laws, with forms for proceedings, to be published; to recommend school and library books; and to make application and apportionment of the income of the university and primary school funds.

In 1851 the law of 1846 was repealed, and an act passed which gave to the Superintendent of Public Instruction general supervision of education in the State, and prescribed his duties to consist chiefly of the following: To make annual reports to the Legislature of all such matters relating to the subject of education and the duties of his office as he might deem expedient to communicate; to publish the school laws, with forms for conducting proceedings under such laws; to recommend books for schools and libraries; and to apportion the income of the primary school fund. In 1855 the law providing for the maintenance of teachers' institutes was passed, and this added to the duties incumbent upon the Superintendent.

Previous to the adoption of the Constitution of 1850, the Superintendent of Public Instruction was appointed by the Governor and confirmed by the Legislature. Under the new Constitution the office became an elective one, the term for which each Superintendent is elected being two years. In case of a vacancy occurring in the office, the Governor appoints, by and with the consent of the Senate, if in session.

II. SUPERINTENDENTS.

To the men who have successively held the office of Superintendent of Public Instruction in Michigan is due much of the credit for the excellence of the educational system of the State. While one may not have accomplished so much as another in bringing about reforms, or in perfecting the system, yet each has done a part. Any review of the history of education in Michigan, therefore, would be incomplete without special allusion to each of these men, and for that reason the following sketches are appended:

Rev. John Davis Pierce.

The first Superintendent of Public Instruction appointed in the United States was Rev. John Davis Pierce, now familiarly and reverently called "Father" Pierce, by the teachers of Michigan. He was born in Chesterfield, New Hampshire, February 18, 1797. His father's name was Gad Pierce, and his mother's maiden name was Sarah Davis. From the age of two years to twenty, he lived with a paternal uncle in Worcester, Massachusetts, receiving eight weeks of schooling each year after he was old enough to attend school. When he was twenty his uncle gave him his time. He then obtained employment as a farm laborer until he had saved one hundred dollars. With this

sum, and a like amount given him by his grandfather Pierce, he started out to get an education. He walked fourteen miles December 14, 1817, buying a Latin grammar on his way; and on the evening of that day took his first lesson in Latin under Rev. Enoch Pond, with whom he made his preparation for college. The following September he entered Brown University; and though obliged to teach three months each year to maintain himself, by close application he was enabled to graduate in 1822, in the first eight of a class of thirty-six. Mr. Pierce then served one year very successfully as principal of Wrentham Academy, in Massachusetts. In the fall of 1823 he entered Princeton Theological Seminary and studied one year. He was then licensed by the Congregational Association, and on January 1, 1825, was settled as pastor of a church in Oneida county, New York. Here he remained laboring acceptably until 1829. The next year Mr. Pierce acted as principal of an academy in Goshen, Connecticut. In the spring of 1831 he received a commission from the Home Missionary Society, to settle as missionary in Michigan or in Illinois, as he might choose. Accordingly, in July of that year, he came to Marshall, Michigan, and in the following autumn brought on his family. He continued to labor as a missionary until the 26th of July, 1836, when, at the organization of the State government, he was appointed Superintendent of Public Instruction. The first work that devolved upon Mr. Pierce in this new office was to draw up a plan for the organization of the school system of the State, and for the disposal of school and university lands. For this purpose he went east, and consulted with Governor Marcy of New York, Edward Everett, and many other prominent statesmen and educators. In January, 1837, he presented his plan to the Legislature, and it was adopted almost unanimously, with very few amendments. Mr. Pierce retained the office of Superintendent of Public Instruction for five years, and a review of his labors during that time shows that he devoted himself with assiduity and rare judgment to the great and responsible duties devolved upon him. Mr. Pierce, in 1842, resumed his work in the Christian ministry, and continued in it until 1847, when he was elected to the State Legislature as representative from Calhoun county. In this capacity he was instrumental in securing several important measures in legislation. In 1850 he was elected a member of the Convention for framing a new Constitution for the State, and here, among other services, he secured the incorporation in the Constitution of the provision for free public schools. In 1852 he delivered the address at the opening of the State Normal School, and soon after removed to Ypsilanti, where he still resides. During much of the time since then he has been engaged in the work of the ministry; but for two years he acted as county superintendent of schools for Washtenaw county. During the more recent years he has had comparatively little to do with public affairs. Although more than fourscore years of age, he still manifests, by his frequent presence at teachers' gatherings and the University and Normal School commencement exercises, his lively interest in educational matters. Nearly fifty years ago he had thoroughly studied the Prussian school system; and it was doubtless due to his familiarity with this system—the best in Europe, then and afterwards attracting so much attention—that he was chosen to the important work of laying the foundations of a system of public schools in the new State. His first report clearly demonstrated the wisdom of his appointment. After discussing at length the primary and intermediate schools, he argued with especial ability and fullness that the University should be organized upon the broadest basis, recommending the ultimate establishment of three departments,—one

of literature, science and arts, one of medicine, and one of law. He has been privileged above most men, in being permitted to live until he saw his expectations fully realized in the growth and development of the school system of the State, including all departments from the primary school to the University. Though Father Pierce is now in his eighty-fourth year, he retains much of the mental and physical vigor for which he was noted in his prime, and which, with the rare opportunities he enjoyed at the organization of the State government enabled him to build up for himself a monument of honor, and to lay, for the people, the foundation of a most benificent system of public schools.

Franklin Sawyer, Jr.

Of the personal history of Franklin Sawyer, Jr., the second Superintendent of Public Instruction of Michigan, we have been able to learn but little. Mr. Sawyer came to Michigan about the year 1830, having graduated a short time previous from Harvard University, and entered upon the study of law in the office of General Charles Larned at Detroit. One of his associate students was Jacob M. Howard, with whom, upon being admitted to the bar, he formed a law partnership about the year 1832. He was afterwards a partner, at different times, with Samuel Pitts and Charles Cleland. Mr. Sawyer pursued the practice of law for a few years only, however, having in the meantime become one of the editors of the *Detroit Courier*, and afterwards of the *Detroit Daily Advertiser*, of which he was also one of the proprietors. He was a man of much public spirit, and did much to build up various enterprizes, among which was the Detroit Young Men's Society, he being among its founders and its first president. His was a bright, sparkling nature, kind, generous and loving. He possessed fine literary taste, and as a writer he was pleasant, brilliant and forcible. On the expiration of Mr. Pierce's term of service as Superintendent of Public Instruction, Mr. Sawyer was appointed to that office, April 8, 1841, in which position he continued until May 8, 1843. Mr. Sawyer entered upon his duties, comprehending the vastness of the educational scheme laid out by the framers of the Constitution—the wide and varied scope of the system devised by his predecessor and adopted by the Legislature; conceiving the immense importance of a thorough acquaintance with the nature of that system, its adaptation to the wants of the people and its power to produce the greatest amount of good results, and to bestow most widely the greatest amount of benefits; appreciating the necessity of a supervision embracing the whole system, in its general and widest sense, and in the minute details of its practical operations through all its various agencies, and in all its different channels. The work of his hands was all important in its bearings upon the future educational career of Michigan. After the expiration of his term of office in Michigan Mr. Sawyer went to New Orleans, Louisiana, where he held for several years the office of Superintendent of Public Instruction. He afterwards removed to his early home at Cambridgeport, Massachusetts, where he resided until his death, which occurred many years since. Mr. Sawyer was the first among those who have been successively placed at the head of the educational system of our State to be called by Providence from the scene of his earthly labors. He is beyond the reach of worldly praise or blame; but it is conceived to be due to his memory, that his untiring industry and unchanging fidelity to the interests of education, should be made the subject of faithful record—a source of gratification to those who cherish the recollection of his services in life, and a memorial as well as an example to those who have been and who

will continue to be recipients of the benefit derived from the faithful performance of his public duties.

OLIVER CROMWELL COMSTOCK,

the third Superintendent of Public Instruction of Michigan, was born in Warwick, Kent county, Rhode Island, March 1, 1781. He was the son of Hon. Adam Comstock, one of the most respected citizens and influential legislators of his day. The early education of Dr. Comstock was acquired in the schools of Schenectady and Greenfield, New York. From his childhood he was known as a close student. He afterward entered the University of New York, and graduated from the medical department. For a short time he practiced medicine near Cayuga bridge, where he married Lydia Smith, daughter of Judge Grover Smith, of Seneca county. Following in the footsteps of his honored father, he early entered political life. He was the member of Assembly from Seneca county from 1810 to 1812; judge of Seneca county in 1812; the first judge of Tompkins county in 1817; member of the House of Representatives during the 13th, 14th, and 15th sessions of the United States Congress. He was ordained a Baptist minister at Washington, D. C., in 1820, but after retiring from Congress he resumed the practice of medicine at Trumansburg, New York, where he remained until 1828. During this period he organized churches at Trumansburg and Ithaca. In 1828 he gave up the practice of medicine and accepted a call to the pastorate of a church at Rochester. While pastor at Rochester, Dr. Comstock was deeply afflicted by the death of his wife. Sad, lonely, and heart-weary, with health impaired, he resigned his charge at Rochester in 1834, and sought change and rest. Visiting Washington he was elected chaplain of the House of Representatives and served during one term. He was then called to the pastoral charge of the First Baptist Church of Norfolk, Virginia, where he remained for nearly two years. On leaving Virginia, Dr. Comstock came to Michigan, and accepted the pastorate of a church in Detroit; preaching afterward as a supply to the churches in Ann Arbor, Jackson, Marshall and Coldwater. May 8, 1843, Dr. Comstock was appointed to the office of Superintendent of Public Instruction of Michigan, and immediately entered upon the duties of the office, serving therein until April 17, 1845. In the discharge of these duties Dr. Comstock faithfully labored for the best interests of the State, and his reports are filled with practical and fruitful suggestions, bearing the impress of the statesman and the Christian. In 1849 he was elected to the State Legislature as representative from Branch county, and here he manifested the same interest in the public weal and the advancement of the highest interests of the State, which had distinguished him in preceding years. Dr. Comstock was a man of commanding presence, tall and well proportioned, having a magnetic presence, and a voice which once heard was never forgotten; while everywhere, in the practice of his profession, on the judicial bench, in legislative halls, as the chief officer of education in the State, in the pulpit, the family, the social circle, he was the same courteous, warm-hearted, loving Christian gentleman. He died at the home of his son in the city of Marshall, Michigan, January 11, 1860, aged seventy-nine years; but he lives in the memory of many who will never cease to cherish his name, and in the undying influence of his noble life.

IRA MAYHEW,

who held the office of Superintendent of Public Instruction of Michigan from 1845 to 1849, and again from 1855 to 1859, was born in Ellisburg, Jefferson

county, New York, in 1814. He received a common school education and entered Union Academy at Belleville at the age of fourteen. In 1832 he commenced teaching school, and followed this calling with eminent success until 1836, when, finding his health considerably impaired, he made a voyage to Newfoundland. In 1837, he was appointed principal of the Adams Seminary, in which capacity he labored until the fall of 1841, when he was elected county superintendent of schools in his native county. At the expiration of his term of office in 1843 he removed to Michigan, where have been performed his most valuable labors for the promotion of educational interests. The people of the Peninsular State were neither slow to observe his qualifications nor backward in securing the services of his talents. He was first appointed principal of the Monroe branch of the University. April 17, 1845, he was nominated by the Governor and confirmed by the Legislature to the office of Superintendent of Public Instruction, being reappointed in 1847, and continuing in the office until March 28, 1849. Mr. Mayhew's labors in the department of education in Michigan commenced when there was neither union school nor normal school in the State, and contributed to the establishment of both. He personally dedicated the first union school in the State, and was present and aided in the organization of the first public school in the Upper Peninsula. He organized a large number of educational associations throughout the State, and for this purpose traveled hundreds of miles on horseback, often riding twenty or thirty miles a day, and addressing meetings of citizens in the evening. In the early part of 1849 he delivered, by invitation, a series of lectures on education, in the State Capitol, after which he was requested by the Legislature, then in session, to prepare and publish a volume containing the views set forth in his lectures. During this year he retired for a short time from public life, for the purpose of complying with the request of the Legislature. The volume of lectures, when issued, was entitled "Means and Ends of Universal Education," and was received by the general public, as well as by distinguished men of literature, with much praise and merited acceptation. In 1851 he published a work on "Practical Book-keeping," which has proved as a text-book very successful. In 1853 Mr. Mayhew was elected principal of Albion Seminary, in which position he remained until 1854, when he was elected by the people of the State to the office of Superintendent of Public Instruction. Mr. Mayhew entered upon the duties of this office January 1, 1855, serving very acceptably therein until January 1, 1859, having been re-elected in 1856. At the close of this, his fourth constitutional term as Superintendent of Public Instruction, Mr. Mayhew revised and republished his work on "Practical Book-keeping," and the same year he established the Albion Commercial College, which was afterwards removed to Detroit. In 1862 he was appointed to and accepted the office of collector of internal revenue for the third district of Michigan, which position he held until 1865, since which time he has devoted his labors to the management of his Business College at Detroit. To Mr. Mayhew is due much of the credit for the advancement of educational interests in Michigan, and not a few of those who now hold high places in the field of educational thought and labor unite in saying that the first inspiration for their life-work was gathered from his intelligent, earnest and devoted efforts in the cause of public instruction.

Francis Willett Shearman,

the fifth Superintendent of Public Instruction, was a native of Vernon, Oneida county, New York, where he was born June 20, 1817. In his nineteenth year

he graduated from Hamilton College. He was possessed of rare mental qualities, which were developed and cultivated by careful training. Recognizing his ability, Hon. H. R. Schoolcraft engaged him, shortly after his graduation, as an assistant in negotiating treaties with the Indians, and while thus employed he was first led to Michigan. In 1838 he located in Marshall, where he found congenial employment as editor of the *Michigan Journal of Education*, the official organ of the State Department of Public Instruction. In 1840 he became connected with the *Democratic Expounder*, published at Marshall, and as its principal editor soon gained high rank as an able, sagacious and forcible writer. In 1846 he was elected associate judge of the Calhoun county court with Judge Hall, of Battle Creek, which office he held until 1848. March 25, 1849, he was appointed to the office of Superintendent of Public Instruction; elected under the provisions of the new Constitution by the people in 1850 to the same office, and re-elected in 1852, continuing in the office until January 1, 1855, a period of nearly six years. The record of Mr. Shearman's services, as Superintendent, constitutes a noble monument to his name. His annual report for 1852 was the most able, comprehensive and valuable work on the school system of the State then extant, and was widely sought and quoted as authority upon the subject. At the close of his term of office as Superintendent of Public Instruction, Mr. Shearman resumed the editorial pen, and for the remainder of his life conducted the *Marshall Expounder*. He held, during this time, several important trusts in his city and county with such acceptance as to command the popular support through all political changes. Mr. Shearman took an active interest in all public affairs almost from the period when Michigan entered the Union until the time of his death, which occurred at Marshall, December 7, 1874. His name will ever be remembered by those who knew him, with feelings of kindest regard.

JOHN M. GREGORY,

Superintendent of Public Instruction from 1859 to 1864 inclusive, was born in Sand Lake, Rensselaer county, New York, July 6, 1822. From childhood he enjoyed the advantages offered to all Americans whose parents are industrious and moral. Like other children of such parents in the rural districts his education was not overlooked, and he was sent to the public schools in the summer, while young, and constantly in the winter until he reached the age of seventeen. The public schools of his native State had already been greatly improved, and he had opportunity to form and indulge his taste for reading by recourse to a district school library, of which he made good use. At the age of seventeen he began his career as a teacher in the district schools. In 1842, being twenty years of age, he entered the freshman class in Union College, having previously attended, for a short time, Dutchess County Academy at Poughkeepsie. Graduating as Bachelor of Arts from Union College in 1846, he devoted himself to the study of law for two years in the offices of Judges Paige and Potter at Schenectady, and in an office in Schoharie county. His clear perceptions, his studiousness, his logical mind, and his ready speech would have insured him great success as an advocate or jurist, but at this time, under the influence of what seemed to him a religious duty, he relinquished his plan of pursuing the legal profession, and entered upon the Christian ministry, his denominational relations being with the Baptist Church. Having spent a portion of his time, while completing his college and professional studies, in teaching public and select schools in various places, among which may be mentioned Deposit and

Hoosac Falls, New York, it was very natural that he should find himself, as he did in 1852, at the head of a flourishing classical school in Detroit. While here, his labors in the school room, in teachers' associations, in the pulpit, and before Sunday-schools, soon gave him a conspicuous place among the friends of education in Michigan. In 1854, he in connection with several others, projected, and, under the auspices of the State Teachers' Association, established the *Michigan Journal of Education*, which was committed wholly to the editorial charge of Mr. Gregory in 1855, and edited by him alone for five years. Under his charge the *Journal* attained a wide circulation and a high character, a large portion of it being the product of his own pen. He also contributed much to other periodicals, educational and literary. In 1859 he entered upon his duties as Superintendent of Public Instruction, an office to which he was afterwards twice reëlected, serving in all six years. In this office his labors were arduous, well directed, and successful. Indeed, it was as Superintendent of Public Instruction that he became especially known as a man of broad views, accurate thought, and as an earnest, successful administrator. His six annual reports, making an aggregate of over four hundred pages, aside from their local and temporary value, express truths and opinions worthy of careful study. In 1865, having declined a renomination as Superintendent of Public Instruction, he accepted the presidency of Kalamazoo College, being called thence in 1867 to the regency of the Illinois Industrial University at Champaign, in which position he has since remained.

ORAMEL HOSFORD

was born in Thetford, Vermont, in May, 1820, and was the son of William and Linda Ellis Hosford. In 1834 he removed with his parents from Vermont to Oberlin, Ohio, where he received his education in the Theological Seminary. In 1844 he came to Michigan and entered Olivet College as its first Professor of mathematics and philosophy. In 1851 he was ordained a Congregational minister. In 1864 he was elected Superintendent of Public Instruction in which position he was retained for eight successive years. During this period he held a nominal position in Olivet College. In 1873 he returned to Olivet College, with which he is still connected as Professor of astronomy and natural philosophy, and instructor in mathematics. During Mr. Hosford's term of office a number of the most desirable reforms in the school system of the State were effected, principal among which was the abolition, in 1869, of the rate-bill law, and the consequent making of school privileges free to all alike. The county superintendency law was also enacted during his incumbency, and its greatest prosperity was reached under his administration. The annual reports of Mr. Hosford, embracing, as they do, a period of eight years during an important portion of the development of our educational system, contain much matter of general interest, and may be profitably consulted by the student of that system's history.

DANIEL BROWN BRIGGS

was born at Adams, Berkshire county, Massachusetts, February 13, 1829. His parents were natives of the same State. After pursuing for some years an academic course of study, he entered Williams College in 1844, from which he graduated in 1848. He immediately commenced the study of law, and was admitted in 1850 to practice in the courts of Massachusetts. About the close of that year his native town established, in compliance with legislative enact-

ment, a free high school, and Mr. Briggs was chosen to the principalship, which position he held for three years. During this time he also did service as a member of the school committee of the town. In March, 1854, he removed to Romeo, Macomb county, Michigan, and entered upon the practice of law, The following year he became Principal of the Dickinson Institute,—formerly a branch of the State University,—located at that place, and was connected with that institution for three years. During the years 1858, 1859, and 1860, he held the position of Superintendent of public schools of the city of Ann Arbor. From thence he removed to Jackson, where he held a similar position for five years. On leaving school work in the summer of 1865, he returned to Macomb county and engaged in farming. In April, 1867, he was elected County Superintendent of schools for Macomb county, and on the first of May following he entered upon the duties of that office, in which he served four years. During his last official term he was made President of the State Association of County Superintendents of Schools. He was director of the Romeo union school district for eight years. He also had charge of the public schools of Mount Clemens, the county-seat of Macomb county, for the school year 1871–72. In November, 1872, he was elected Superintendent of Public Instruction, which office he retained four years, having been re-elected at the close of his first term in 1874. In 1879 Mr. Briggs was appointed to the office of Deputy Secretary of State, which he still occupies.

HORACE SUMNER TARBELL

was born in Chelsea, Vermont, August 19, 1838. His father, Rev. Sumner Tarbell, was a member of the Vermont Conference of the Methodist Episcopal Church. He received his preparatory training in the seminaries of Vermont, and afterwards took a classical course at Wesleyan University, Middletown, Connecticut, graduating in 1859, third in a class of thirty-six. He then entered Belleville Seminary, Canada, as Professor of natural sciences, where he remained for three years. From 1862 to 1865, he was Principal of Farmerville County Grammar School, and the following year was Principal of Central Academy, McGrawville, New York. From 1866 to 1871, he was connected with the schools of Detroit, during a part of that time being a supervising principal of the Bishop and Duffield schools of that city. Mr. Tarbell organized the evening school at the Detroit House of Correction, in 1869, which awakened much interest among prison managers, as it was the first successful attempt at a regularly organized prison school. In 1871 he was chosen Superintendent of the public schools of the city of East Saginaw, which position he held for six years. In the fall of 1876, he was elected Superintendent of Public Instruction. September 1, 1878, Mr. Tarbell resigned this office and accepted the superintendency of the city schools of Indianapolis, Indiana, where he has since been located. Mr. Tarbell has held several offices in the National Educational Association, and was also President of the Michigan State Teachers' Association in 1875.

CORNELIUS ALBERT GOWER,

the present Superintendent of Public Instruction, was born at Abbot, Maine, in 1845. He entered Waterville College in 1863, but, coming to Michigan before graduation, he entered the senior class of the University in 1867. Graduating from the classical course in that year, he entered the law department in 1868. His tastes, however, inclined him to the profession of teacher. He

taught three seasons in Maine, one in Massachusetts, and one year in Ann Arbor; he was Superintendent of the schools at Fenton for three years; was County Superintendent of schools of Genesee county three and a half years; was Superintendent of the schools in Saginaw City four years; and was President of the Michigan City School Superintendents' Association in 1878. On the resignation of Superintendent Tarbell, in 1878, he was appointed by the Governor to the office of Superintendent of Public Instruction, being afterward elected by the people at the general election the same year and again in 1880.

III. DEPUTY SUPERINTENDENTS.

In 1859 an act was passed which gave authority to the Superintendent of Public Instruction to appoint a deputy. The necessity for such an officer had been presented to the Legislature in some of the reports of the preceding years, and had become quite apparent to all with whom the Superintendent's office was brought into relation. While the law made it necessary for the Superintendent to keep his office at Lansing, it was impossible for him to remain steadily in it. His duties called him into all sections of the State. Due preparation for labors in the field required much time and thought and labor, which no one could perform but himself. While he was engaged in this preparation; in active visitation of the schools; in attendance at institutes; in the delivery of lectures, he could not well perform the clerical work of the office. In providing for an assistant it was desirable that not only mere clerical aid be secured, but that such assistant be clothed with official powers, which he might exercise in case of the absence of the Superintendent, or should a vacancy in the office of Superintendent occur. Experience has proved the wisdom of the Legislature in providing for a Deputy Superintendent, and much of the success in the administration of duties connected with the Department of Public Instruction since the law referred to was passed, is attributable to that officer.

Cortland Bliss Stebbins,

the first Deputy Superintendent of Public Instruction of Michigan, was born in Williamstown, Vermont, February 17, 1812. His earlier education was obtained in the public schools. At the age of eighteen he commenced writing for the local papers, supporting himself, meanwhile, as a cabinet maker. For a short while he attended school at the Montpelier Academy. At the age of twenty-one he was appointed to an office in the State Legislature. He afterward went to Buffalo, New York, and entered a law office, where he remained about a year. In 1842 he removed to Adrian, Michigan, and engaged in the furniture business. He soon afterwards became connected with the *Michigan Expositor*, which he edited until 1850. During a part of several succeeding years he held relations with the Postoffice Department as a special agent. In 1855 he held the office of supervisor in the city of Adrian. In 1856 he was appointed by the Commissioner of the State Land Office to investigate depredations on the pine lands belonging to the State in several northern counties. In October, 1857, he was engaged by the publishers of the *Lansing Republican* as editor of that paper, and he immediately afterward removed to the Capitol of the State, where he has since resided. During the time he was engaged in editing the *Lansing Republican*, he also acted as private secretary to Governor Kinsley S. Bingham. He resigned these positions during the next summer

and July 1, 1858, he entered the office of the Superintendent of Public Instruction as a clerk, under Superintendent Mayhew. The following winter, the office of Deputy Superintendent of Public Instruction was created by the Legislature, and Mr. Stebbins was appointed by Superintendent Gregory to fill the same. To this office he was successively re-appointed by Superintendents Hosford, Briggs and Tarbell. July 1, 1878, he resigned the office, having faithfully and worthily held it for almost twenty successive years.

WILLIAM LOCKE SMITH,

the present incumbent of the office of Deputy Superintendent of Public Instruction, is a native of Parke county, Indiana, where he was born January 20, 1844. His father, Rev. William H. Smith, was one of the early pioneer preachers of the Methodist Episcopal Church in southern Indiana and Illinois. In his younger days Mr. Smith did not have the opportunity of attending school, but the lack was made up by the faithful teaching of his mother. In the fall of 1859 he entered Indiana Asbury University, at Greencastle, where he pursued collegiate studies for some time. During the war of the Rebellion he enlisted for three months in the 55th regiment of Indiana volunteers, and on the expiration of his term of service in that regiment, he re-enlisted in the 115th regiment, Indiana volunteer infantry. At the close of the war, in 1865, he engaged in teaching school, which calling he followed for several years. Having, in the meantime, given his attention considerably to the study of music, in 1869 he entered the musical profession as a teacher and conductor of conventions. In 1872 he was engaged as special teacher of music in the public schools of Chillicothe, Ohio, where he remained two years. In 1874 he accepted the position of special teacher of music in the public schools of East Saginaw, Michigan. In 1876 he accepted the position of special teacher of music in the Saginaw city schools in addition to his engagement in East Saginaw, and consequently he thereafter divided his time equally between the schools of the two cities. In 1878, on the resignation of Mr. Stebbins, as Deputy Superintendent of Public Instruction, that office was tendered him by Superintendent Tarbell, and accepted. He was afterwards re-appointed by Superintendent Gower. Since his connection with the office he has, in addition to his official duties, prepared and published a text book on music for use in public schools, entitled the "Practical Music Reader," which has met with a very cordial reception on the part of the educational public. Mr. Smith has also written much for the columns of the press, and has conducted the educational department of the *Lansing Republican* for several years.

TEACHERS' ASSOCIATIONS.

The present liberal school system of Michigan is largely due to conventions and associations held in the interest of education. These agencies have enlarged the views of teachers, enlightened public sentiment, and indicated and secured legislative action. They have also done much to improve school instruction and management. A review of these agencies is, therefore, an important part of the history of educational effort and progress in the State.

I. EARLY CONVENTIONS AND ASSOCIATIONS.

The first educational convention in Michigan, of which we have been able to find any account, was held in Detroit, commencing January 3, 1838. This convention owed its existence mainly to the influence of Superintendent Pierce. It continued its sessions during three days, and finally organized a society, called the "Michigan Literary Institute." It is probable that this society died soon after its birth, as no further records or traces of it can be found.

In 1839, common school associations were formed in the counties of Calhoun, Branch, St. Joseph, and perhaps in others, but these organizations, so far as appears, accomplished very little.

Several teachers' associations and educational societies were formed during the years 1845 and 1846, while Ira Mayhew was Superintendent of Public Instruction.

A convention of delegates from various county societies met at Ann Arbor, June 23, 1847, and organized the "Michigan State Educational Society," and made it auxiliary to a society of the same nature formed in the previous year at Chicago. Among those who delivered addresses at this meeting at Ann Arbor were General Cass, Gov. Felch, Superintendent Ira Mayhew, and E. C. Seaman. Among the officers were Rev. G. L. Foster, recently deceased, and Dr. J. A. B. Stone, of Kalamazoo. Two annual meetings were held by this Society, one at Jackson in 1848, and one at Lansing in 1849, and then, apparently, it went "the way of all the earth" and was heard of no more.

II. STATE TEACHERS' ASSOCIATION.*

Immediately following the formal opening of the State Normal School, at Ypsilanti, in 1852, a State Teachers' Institute was held, during the progress of

* For this account considerable credit is due Prof. D. Putnam of the State Normal School, much of it having been copied from his "Sketch of the History of the Michigan State Teachers' Association," published in 1877.

which the subject of organizing a State Teachers' Association was freely and fully discussed, and the general sentiment of those present was found to be favorable to the formation of such a society. A committee was accordingly appointed to give the matter more careful consideration. This committee reported at a meeting of the members of the institute, held October 12, 1852. Prof. Welch, who was one of the most active and influential leaders in the movement, explained briefly the objects and designs of a teachers' association. J. E. Bateman then offered the following preamble and resolution, which were adopted:

"WHEREAS, The cause of education in this State demands efficient organization to advance its various interests, and to secure greater harmony and concert of action among its friends; therefore,

"*Resolved*, That we who subscribe our names to this resolution hereby form ourselves into a State Teachers' Association, which shall be auxiliary to the Superintendent of Public Instruction and the State Normal School."

Under this resolution, as a preliminary and temporary constitution, officers were elected, committees appointed, among these one to prepare the draft of a constitution to be presented at the first meeting in 1853, and arrangements were made for the exercises of the next session of the Association.

In the calendar of the Association this meeting is reckoned as the first annual meeting, and October 12, 1852 may be properly regarded as the birthday of the organization. The officers elected at this time were: A. S. Welch, president; Miss A. C. Rogers and H. B. Thayer, vice presidents; John Horner, recording secretary; J. M. B. Sill, corresponding secretary; Henry Cheever, treasurer.

The next meeting, known as the second annual meeting, was held at Ypsilanti, in connection with a teachers' institute, commencing March 29, 1853. The sessions of the Association alternated with those of the institute, continuing until April 8. A constitution was reported by the committee, discussed and adopted. Prof. Welch was re-elected president, and among the other officers occur the names of Joseph Estabrook, J. F. Nichols, and J. M. B. Sill who still remain among us, vigorous and active in every good educational work.

A semi-annual meeting was held at Kalamazoo, commencing September 29, of this year. This meeting, like the previous ones, was in connection with an institute, the sessions of the institute occupying the mornings, and those of the Association the afternoons and evenings of five days. Thus far the sessions of the Association had been held in close connection with teachers' institutes. The Association was, in some respects if not in all, secondary and subordinate to the institute, and its exercises evidently partook largely of an institute character. It was now determined to cut loose from institutes and to try the experiment of an independent meeting at the next annual gathering. It was felt that there was enough of vigor and strength in the organization to go safely and successfully alone.

The third annual meeting was held in Detroit, commencing April 18, 1854, and the Association presented itself for the first time in its own peculiar and proper character. The meeting was enthusiastic and successful. Among the most prominent and active members present were A. S. Welch, J. M. Gregory, E. O. Haven, J. Estabrook, Rev. C. A. Leach, J. F. Cary, L. H. Fisk, Levi Bishop and A. L. Bingham. Horace Mann, of Massachusetts, delivered an address on "Teachers' motives," and participated largely in the discussions upon the various papers and reports. Henry Barnard, of Connecticut, was also present, and helped to increase the interest and value of the sessions. Rev. J. M. Gregory was elected president.

The semi-annual meeting of 1854 was held at Marshall, commencing August 15, and continuing three days. The question of religious instruction in the public schools was very vigorously and warmly discussed. Among the most active members and visitors present were President Gregory, Professors Haven, Welch, Boise, Stone, Levi Bishop, J. Van Arman, Rev. Mr. Trowbridge, of Marshall, and Dr. Solger, of Boston, who delivered a lecture on history.

The fourth annual meeting was in the city of Ann Arbor, April 22 to 24, 1855. The sessions were largely attended, and the tone and spirit of the meeting were vigorous and hopeful. The special feature of the occasion was a protracted and animated discussion of the subject of the co-education of the sexes, introduced by a report presented by D. Putnam, then of Kalamazoo. Among those who took part in the proceedings by way of addresses, papers or discussion, were President Gregory, Ira Mayhew, Superintendent of Public Instruction, Professors Haven, Welch, Nutting, Estabrook, Chandler, Boise, D. Putnam, Stone, Dunlap, Winchell, Hubbard, Frieze, Miss A. C. Rogers, and Miss H. Cutcheon. Prof. Joseph Estabrook, of Ypsilanti, was chosen president.

The semi-annual meeting of 1855, held in Jackson, December 26, was thinly attended on account of the unusual severity of the weather. The cold, however, did not chill the good spirit and enthusiasm of the faithful few who were present in spite of the arctic temperature. The names of Estabrook, Gregory, Welch, Nutting, Putnam, Ripley, Newcomb, Hubbard, Botsford, Tenney, Mahan, and a few others, are found in the reports of the exercises. The most important discussions occurred upon a plan for the study of the English classics, reported by Prof. Welch, and upon a report presented by Mr. Gregory, advocating the system of county superintendency of schools.

The fifth annual meeting took place at Ypsilanti, August 18, 19 and 20, 1856. The attendance was large, and the sessions were unusually interesting. Addresses were delivered by Professors J. R. Boise, of the University, Travis, of Delaware, and Estabrook, of Ypsilanti. Papers or reports were read by Professors Tenney, Winchell, Gregory, Haven, and Miss M. S. Gilpin, of Philadelphia. Among those who participated in the discussions were Professors Haven, Welch, Stone, Gregory, Abbot, Tenney, Hosford, Hinsdale, Estabrook, Northrop, Nutting, and Superintendent Ira Mayhew. Dr. J. A. B. Stone, of Kalamazoo, was elected president. Among the other officers appear the still well known names of Sill and Bellows. The county superintendency of schools and the study of natural history were prominent topics of debate.

The semi-annual meeting of 1856 commenced December 24, at Battle Creek. At this session the Association was incorporated under a general law of the State which had been enacted by the Legislature in 1855. A large part of the time of the meeting was occupied in the discussion of subjects connected with school legislation, among them the county superintendency, and a proposed law in relation to the funds derived from the sale of "swamp lands," so-called. Most of the active members of the Association were present and took part in the proceedings. Among the newer members were D. P. Mayhew, of Ypsilanti, E. Olney and G. M. Dewey.

The sixth annual meeting was held at Adrian, commencing August 18, 1857, and continuing three days. Papers were read by T. C. Abbot, E. J. Boyd, F. Hubbard, E. W, Chesebro, Rev. J. M. Gregory, and Superintendent Ira Mayhew. Lectures were delivered by Dr. Mahan and Dr. Stone, and a poem was read by J. M. B. Sill. Franklin Hubbard, of Adrian, was chosen president.

The semi-annual meeting of 1857 was held at Ann Arbor, December 29 and

30, occupying but two days instead of three, as had been the custom hitherto. Papers or addresses were read by E. L. Ripley, Miss H. M. Cutcheon, O. Hosford, D. Putnam, A. Winchell, and Rev. L. D. Chapin. The sessions were closed by a social meeting, characterized by toasts, pleasant speeches, and great good humor. Among those who participated freely in the discussions were Dr. Tappan, then President of the University, Dr. Chapin, of Ann Arbor, Rev. G. L. Foster, of Ypsilanti, D. McIntyre, T. C. Abbot, O. Hosford, R. Nutting, J. M. Gregory, A. Winchell, A. S. Welch, E. Tenney, G. M. Dewey, E. C. Seaman, Dr. Palmer, of the University, Hon. J. D. Pierce, and Levi Bishop, of Detroit.

The seventh annual meeting was held at Niles, August 17 and 18, 1858. The attendance at this meeting was small, but the sessions were full of earnestness and activity. The most important discussions took place upon the subject of "Free schools," introduced by a paper read by Mr. W. F. Munson, of Howell, and upon "The relation of the sexes in education," introduced by a paper read by Mrs. Stone, of Kalamazoo. Addresses were delivered by the President, Prof. Hubbard, and by Rev. Dr. Dempster, of Evanston, Ill. Prof. A. Winchell, of Ann Arbor, was elected president for the next year. The semi-annual meeting of this year was held at Jackson, December 27, 28, and 29, 1858. The opening address was delivered by J. M. Gregory, who had been elected Superintendent of Public Instruction, and who was about to enter upon the duties of office. The most vigorous debate of the sessions occurred upon the question of "Uniformity of text-books" in schools. District in place of township libraries were recommended. Papers were read by E. L. Holden, U. W. Lawton, and Miss Swartwout. A meeting of school directors took place in connection with this meeting of the Association. The sessions were closed by a very entertaining reunion.

The eighth annual gathering of the association took place at Pontiac, August 16, 17, and 18, 1859. A full report of the "transactions" of this meeting was published in pamphlet form by order of the Association, together with a brief history of the Society up to that time. The report says "the session was attended by a very respectable number of teachers, and by unusual numbers of citizens" of the village and surrounding country. It was the first meeting held north of the Central Railroad, and a most generous hospitality was extended by the people of Pontiac. Prof. H. S. Frieze, of the University, delivered an address upon "The practical and useful;" Dr. E. O. Haven, of Boston, upon "The American system of education," and Prof. A. Winchell, of the University, upon the topic "What makes the successful teacher?" Papers were read by J. Richards, D. B. Briggs, and L. R. Fiske. The subjects which called out the most interesting and animated discussions were the "Library system of the State," and "Moral and religious instruction in schools." The Association voted to discontinue the semi-annual meeting which had thus far been held each year during the holidays, and determined to hold its annual gatherings in the month of August. Prof. E. J. Boyd, of Monroe, was elected president.

The ninth annual meeting occurred at Ypsilanti, Aug. 21 to 24, 1860. The formal addresses during the session were by Rev. Hogarth, of Detroit, on the "Use of the affections as a mental stimulus;" by Prof. A. S. Welch on "The natural system of instruction;" and by Dr. Thomas Hill, then President of Antioch College, on "The true order of studies." Papers were read by J. J. Sadler, Silas Betts, J. F. Carey, Miss A. C. Rogers, E. Danforth, and E. Olney. A report on "Reforms in school laws" was presented by Superintendent J. M.

Gregory, and on "Text-books" by Prof. T. C. Abbot. A vigorous and lively discussion was had upon the question of "Prizes in schools," and the topics of some of the papers called out interesting debates. Prof. E. L. Ripley of Jackson was chosen president; and among the other officers are a few names still well known as teachers in our State—E. Olney, J. M. B. Sill, O. Hosford, T. C. Abbot, D. Putnam. Yet in examining the records and proceedings of twenty years ago, one is forcibly reminded of the fact that most of the active members of that time have disappeared from our ranks, and many of them from our State. The compensation is found in the new and fresher blood which, from year to year, has flowed in to give a quickened life to the old current.

The tenth annual meeting was held at Kalamazoo, commencing Tuesday evening, August 20, 1861, and closing the Friday following. Addresses were given by Prof. E. L. Ripley, President Fairfield, and Dr. Tappan, of the University, and Superintendent Wells, of Chicago. Papers were read by Superintendent Gregory, Professors Welch, Boise, Olney, Halbert, and Miss Hoppin. Interesting reports on assigned topics were presented by Professors Sill, Payne, Ripley, and Hosford. The debates were animated and profitable; and the sessions were closed by a spirited and patriotic discussion upon the "Duty of the teacher to his country." Prof. J. M. B. Sill was elected president.

The eleventh annual meeting was held at Hillsdale, August 19, 20, and 21, 1862. Hon. Newton Bateman, of Illinois, delivered an address and took an active part in the discussions. President Fairfield also gave an address entitled "Utopia and Utopian schools," and another upon the "Dignity of the teacher's office." Professors J. Goodison, O. Hosford, and Saddler read papers. Prof. A. S. Welch delivered lectures on "Object Lessons," on "Nature, the teacher's guide," and on "School discipline." The records show a comparatively limited attendance, and indicate that a very large proportion of labor fell upon a few "always prepared" and earnest workers. The state of the country naturally claimed a share of the time and attention. Hon. E. B. Fairfield was made president, and the time and place of the next meeting were referred to the executive committee.

The twelfth annual meeting took place at Marshall, commencing August 18, 1863, and closing August 20. In the absence of President Fairfield, Vice-President W. S. Perry presided. Hon. William Warren delivered an introductory address upon the "Relations of higher education to civilization and culture." Hon. J. M. Gregory gave an address on "Grades in education." Rev. S. J. Rogers of Battle Creek, lectured on "William of Nassau and of Orange." Papers were read by Prof. E. A. Strong on "Algebra," by Dr. Stone on "The sphere of the voluntary in the educational work," and without any introductory paper, the subject of "Marking and reporting" was freely discussed by several gentlemen. The number of members present was not large. Prof. O. Hosford, of Olivet, was elected president, and the Association decided to hold its next session upon the first Tuesday of July instead of the usual time in August, hoping by the change to increase the attendance and the interest in the exercises.

The thirteenth annual meeting occurred at Ann Arbor, opening July 5, 1864. Hon. J. M. Gregory addressed the Association on the "Relation of Christianity to education," and Prof. S. S. Green, of Rhode Island, lectured upon the same subject with reference to its practical applications. Prof. Green also gave an informal lecture upon "Grammar." Dr. Haven, of the University, gave a lecture upon the "Importance of public schools." Prof. W. H.

Payne read a paper in relation to the establishment of an "Educational Journal," and resolutions were passed favoring the publication of such a journal at the earliest practical moment, but declining to pledge the credit of the Association, in any way, in behalf of the enterprise. Resolutions were also adopted recommending the establishment of training classes for teachers in connection with the high schools throughout the State, and the opinion was repeated that the interests of the schools demanded a county system of supervision. Prof. D. Putnam, of Kalamazoo, was chosen president.

The fourteenth annual meeting took place in Detroit, commencing July 11, 1865. Lectures or addresses were delivered by Prof. A. Winchell on "How to teach the natural sciences;" by President J. M. Gregory on the "Organization and government of schools;" by Prof. Whipple, of Hillsdale, upon "Reading." President Gregory also gave an address on the "Relations of the common schools to the higher schools." Prof. J. Goodison read a paper on "Geography," Prof. Sill on the general subject of "Instruction," Miss M. L. Rice on "Education a test, not a creator of power," Miss Thayer on "How to teach playing," and Superintendent O. Hosford on "Educational forces."

Prof. Payne read a report in relation to an educational magazine, which, after an animated discussion, was referred to the Executive Committee. The "Library system of the State" was quite fully considered and debated, and the subject was referred to a special committee to report at the next annual meeting. The same action was taken upon the question of the county superintendency. The Association, after some discussion, voted to hold its annual meetings, in future, during the "holiday week," between Christmas and New Year's. Prof. W. H. Payne was elected president.

In accordance with the vote of the Society, the fifteenth annual meeting was held six months after the last preceding one, opening December 26, 1865, at Battle Creek. This year has, consequently, the distinguished honor of embracing two annual gatherings of the teachers of Michigan. The attendance from certain portions of the State, and of some classes of teachers, was large, and the sessions generally were full of interest. The president, Prof. Payne, gave an introductory address. President Abbot, of the Agricultural College, lectured on "The study of words;" President Richard Edwards, of the Illinois Normal University, on "Sources of personal influence;" President Gregory, of Kalamazoo, on "The life and character of Dr. Francis Wayland." Miss Ruth Hoppin read a paper on "The causes of failure in teaching;" and the subject of "Elocution" was presented by Prof. A. A. Griffith and Prof. Mark Bailey, of Yale College. "Reading" was discussed by President Edwards, and "Music" by Prof. P. P. Bliss, of Chicago. The "self-reporting" system in schools was vigorously discussed by several members, and among the resolutions was one favoring the township as a single district in preference to the present system. The sessions were closed with a social entertainment at which refreshments, short speeches, and general good cheer were pleasantly intermingled. Prof. W. H. Payne was re-elected president.

The sixteenth annual meeting was held at Kalamazoo, December 26 to 28, 1866. Dr. E. O. Haven delivered an introductory lecture on "The school, the pulpit, and the press." Rev. Geo. B. Jocelyn lectured on "Woman—her education." Prof. J. A. Banfield read a paper on "The teachers of our common schools and the facilities for their professional education." A paper prepared by Prof. Ten Brook, of the State University, was read by Dr. Haven, the author being absent on account of sickness. Prof. E. Olney, of the Uni-

versity, read a paper entitled "An inquiry into the influence of mathematical studies upon the mind." Prof. Ripley, of the Normal School, presented the subject of "Drawing," Prof. J. Bengal read a paper on the "Co-education of the sexes," and Prof. A. A. Griffith gave, as a closing exercise, a literary and elocutionary entertainment. Prof. D. P. Mayhew was elected president of the State Association.

The seventeenth annual meeting, being the meeting for 1867, was held at Lansing, commencing January 1, 1868. Prof. A. Winchell opened the sessions with a lecture on "The uses of science;" Prof. Sill delivered a lecture on "The effect of teaching upon teachers;" Prof. Hewitt, of Olivet College, read a paper entitled, "A plea for a high standard of scholarship;" Prof. Payne, on "Normal instruction;" Prof. H. L. Wayland, on "The authority of the past in matters of education," and Miss A. C. Rogers on "Orphan asylums and Freedmen's schools." These papers were subsequently published in pamphlet form so far as they could be secured. Discussion was had upon the question, "Should the state compel the education of her children?" A resolution favoring the abolition of the "rate bill" was adopted. It was determined to hold the next meeting at Adrian. Prof. H. L. Wayland, of Kalamazoo, was chosen president.

The eighteenth annual gathering was held in Adrian, opening Tuesday evening, December 29, 1868. The county superintendents also held a meeting at the same place, and, during a portion of the time, the two bodies united in joint session. Superintendent Hosford gave an address to the united Associations on "The relations of the different parts of our educational system." Prof. Wayland gave a lecture on "Woman and her destiny;" Prof. Griffith on "Elocution." Prof. L. McLouth, of Battle Creek, read a paper on "Primary teaching and the means of its improvement." Miss Julia A. King, on "Teaching outside of text-books." President Abbot upon the "Study of English grammar," and Miss G. Webb on "Parental influence." Some of the papers called out spirited discussions and naturally developed a wide divergence of opinions. "The results of the county superintendency" were considered, and a resolution was passed favoring the establishment of another Normal School, and another favoring the admission of women to the University. President T. C. Abbot, of the Agricultural College, was elected president for the next year, and the Association adjourned to meet in Saginaw City.

In accordance with adjournment, the nineteenth annual meeting was held at Saginaw City, December 28, 29, and 30, 1869. The meeting of the county superintendents occurred at the same time, and a portion of the exercises took place in joint session. Superintendent Parker of Oakland county read a paper in joint meeting on the "County superintendent's relation to school reform," and a joint discussion was had upon the question of "Compulsory education." Superintendent Ford, of Berrien county, read a paper upon this topic. Superintendent D. Doty, of Detroit, delivered an address consisting of "Suggestions to teachers." Prof. Daniel Putnam, of the Normal School, read a paper on the "Relations of teachers to the insane." Miss Harriet Barnes, of Mason, on "Examinations at the close of terms of school." Prof H. S. Frieze of the University gave an address on "The relation of Greek and Roman to modern liberal education," and Prof. Darrow, of the Normal School, read a paper on "Methods of teaching Latin and Greek." Miss Ruth Hoppin, of the Normal School, read a paper on "A woman's college," and a paper prepared by Mrs. C. A. Cleveland, of Lansing, upon the "Education of women" was read by Pres-

ident Abbot. Prof. A. A. Griffith gave a conversational lecture on "Elocution and reading." Prof. J. Estabrook, of East Saginaw, read a paper on "The Bible in schools," which occasioned a very vigorous and protracted discussion. The sentiment of the Association, as a whole, was found to be strongly adverse to the exclusion of the Bible from our schools by any legal enactments. The Association decided to hold a meeting at some time during the following August. Superintendent Duane Doty of Detroit was elected president.

Pursuant to action at the nineteenth annual meeting a special session was held at Grand Rapids, August 10, 11, and 12, 1870. A meeting of the county superintendents had been held on the previous days of the same week, which was fully attended and of considerable interest in the character of its papers and discussions. The association was addressed by Rev. C H. Brigham, of Ann Arbor, on "Words and their uses;" by Prof. A. A. Griffith on "Elocution and gymnastics combined;" and by Z. R. Brockway, of Detroit, upon "The influence of education upon crime." Valuable papers were read, by Prof. E. A. Strong, of Grand Rapids, upon "A high school course of study;" by Miss Kate Brearley, of Lansing, on "The force of human nature;" by Prof. H. S. Tarbell, of Detroit, on "The teacher's personal danger;" and by Prof. E. A. Fraser, of Kalamazoo, on the subject, "Teaching; by whom, when, and where." Some of these papers were quite thoroughly and vigorously discussed. A committee of five was appointed to report at the next annual meeting a course of studies for graded schools. The resolutions reported gave occasion for a very animated debate, and were modified in several points before adoption. The Association adjourned to meet at Ypsilanti in December of the same year.

The twentieth annual meeting was held at Ypsilanti, December 26, 27, and 28, 1870. Addresses were delivered by Prof. A. A. Griffith, on "Elocution;" by E. G. D. Holden, of Detroit, on "Mrs. Grundy;" and by L. T. Ives, of Detroit, on "Art and its relations to education." A paper was read by Prof. W. H. Payne, on "The relations of the University to the high schools of the State." This paper gave occasion for a protracted and somewhat exciting discussion. A paper was presented by Prof. J. E. Jacklin, of Detroit, on "The spirit of the school;" one by Prof. J. F. Nichols, of Detroit, on "The relation of a principal to his school;" and one by Prof. Hardy, of Owosso, on "The means and ends of education." The resolutions reported received more attention than usual, and some of them were adopted after amendment. Consideration was given to normal instruction in general, and to the question of a normal department in the State University. Some differences of opinion were developed touching these subjects. Duane Doty, of Detroit, was reëlected president, and the time and place of the next meeting were referred to the executive committee. A small meeting of the county superintendents took place in connection with this meeting of the Association, only sixteen of the fifty-two superintendents being present.

The twenty-first annual meeting took place in the city of Detroit, opening December 27, 1871. Prof. A. A. Griffith delivered an address entitled, "Practical elocution defined and illustrated;" Prof. I. M. Wellington, of Detroit, read a paper upon "The teacher's ideal;" Miss D. E. Henry, of Grand Rapids, on "Our work;" Prof. H. D. Harrower, of Paw Paw, on "Our union schools;" D. C. Scoville, of Bay City, on "The manhood of strength and gentleness;" and Prof. W. B. Silber, of Detroit, gave an address upon the subject, "Education inseparable from civilization." Short speeches were

made by Hon. J. D. Pierce, Prof. Joseph Estabrook, and W. D. Wilkins, of Detroit. Prof. J. F. Nichols, of Detroit, was elected president.

The twenty-second annual session occurred at Jackson, December 26, 27 and 28, 1872. The attendance was large, and the exercises, as a whole, were of a high character. Addresses were delivered by President J. B. Angell, of the State University, on "The reflex influence of the teacher's profession;" by Prof. J. M. B. Sill on "The natural sciences;" by President T. C. Abbot on "Novels and novel reading," and by Prof. C. A. Kent on "The relation of the State to the schools." Papers were read by Prof. U. W. Lawton, of Jackson, on "Preparation for the University;" by Prof. W. S. Perry, of Ann Arbor, on "High schools;" and by Prof. J. Estabrook, Principal of the State Normal School, on "Normal schools." Some profitable discussion followed the reading of some of the papers. Resolutions introduced by Mr. G. B. Stebbins, of Detroit, in relation to the importance and value of scientific and practical education, were unanimously adopted. President J. B. Angell was chosen president of the Association.

Before adjournment it was voted to accept the invitation of the Ohio State Teachers' Association to hold a joint meeting at Put-in-Bay, July 2 and 3, 1873. The meeting was held accordingly, but was regarded by the Michigan Association as an informal one, so far as it was concerned, and no report of the proceedings appears upon the records. It will not be improper to state, however, that members of the Michigan Association bore an honorable part in the exercises. President Angell delivered an address upon "The philosophic study of literature;" D. Putnam read a paper on "The common schools historically considered," and Prof. E. A. Strong on "Preparation for the high school." Professors Olney, Sill, Doty, Bellows, and others took part in the discussions.

The twenty-third annual sessions were held at Ann Arbor, occupying December 30 and 31, 1873. The transactions were subsequently published in pamphlet form and generally distributed among the members of the Association. The teachers were welcomed to Ann Arbor and to the University by President Angell. A paper was read by Superintendent W. H. Payne, of Adrian, upon the "Old and the new in education." The discussion of the topic was introduced by Prof. Daniels of Grand Rapids. Miss Kate Brearley, of Kalamazoo College, presented a paper upon "Systematic resting." Prof. Z. Truesdel, of Flint, read a paper on "Normal instruction in high schools," and Prof. Bellows, of the Normal School, read a brief paper upon the same subject. Judge James V. Campbell, of Detroit, delivered an address upon "The results of teaching." Miss Ruth Hoppin, of the Normal School, read a paper entitled "The schoolmaster." Prof. Sill delivered an illustrated address upon "The study and teaching of zoölogy." Prof. O. B. Curtiss read a paper on "Educational hindrances," which was discussed by Prof. H. S. Tarbell and others. Superintendent D. B. Briggs read a paper on "Teaching common things." Prof. Hewitt, of Olivet College, gave a closing address upon the subject, "What shall we demand of our colleges!" Prof. Daniel Putnam, of the State Normal School, was elected president.

The twenty-fourth annual meeting of the Association convened at Kalamazoo December 28, 1874, and continued its sessions until the evening of the 30th. An address of welcome was made by Dr. Chapin, president of the school board of Kalamazoo, to which the president replied on behalf of the Society. President Angell, of the University, gave an address on "The philosophic study of literature;" Prof. J. M. B. Sill, of Detroit, gave an illustrated lec-

ture on "Natural history;" Prof. Hilgard, of the University, discussed the topic, "How to teach natural science to children," and was followed by Prof. McLouth, of the Normal School, upon the same subject. Prof. Beal, of the Agricultural College, also advocated the study of "Natural history," and illustrated his method of teaching it. A paper on "Examinations: their purpose and methods," was presented by Prof. Edward Olney, of the University, and discussed by several gentlemen. Prof. J. C. Jones, of Pontiac, read a paper entitled "What preparatory work the high schools can do," which called out an interesting debate. Prof. D'Ooge, of Ann Arbor, presented the subject, "What the University and colleges ask of the high schools." Prof. Babcock, of Mt. Clemens, read a paper on "The independent work of the high schools," which elicited considerable animated discussion. Prof. A. George, of Kalamazoo, presented an essay on the "Culture of teachers outside of their professional work;" Miss Lucy A. Chittenden, of Ann Arbor, read a paper on "School work in its relations to the moral and religious nature of the pupils," and Prof. J. Estabrook, of the Normal School, presented the subject of "Teaching reading practically considered," which topic was also discussed by Prof. Sill. Resolutions were reported and adopted recognizing the unity of the educational work in our State, endorsing the action of the authorities of the University in receiving students from approved high schools without the usual examinations, and recommending the adoption of some measures to secure uniformity in the courses of study and grading of the public schools. Superintendent H. S. Tarbell, of East Saginaw, was chosen president, and the Association adjourned with brief addresses from the out-going and in-coming presidents.

The Association held its twenty-fifth annual meeting at Grand Rapids, December 28, 29, and 30, 1875. The Society was welcomed to the city by Henry Fralick, President of the Board of Education, and a reply to the welcome was made by President Tarbell. Prof. C. A. Kent, of the law department of the University, delivered an address on "The origin and extent of the duty of the state to educate." President Tarbell made an address in which he sketched the outlines of a system suitable, in his judgment, for the schools of Michigan, and also presented some practical suggestions in respect to the management and organization of the State Teachers' Association. The suggestions and recommendations were referred to two committees, one to report during the sessions, the other at the next annual meeting. Gov. John J. Bagley and Rev. D. C. Jacokes addressed the Association in relation to the "Centennial Educational Exhibit" at Philadelphia. H. A. Ford, of Kalamazoo, read a paper on "The relation of social science and education;" Miss S. J. Pyne, of Grand Rapids, on "Preparation for teaching;" Prof. F. H. Pease, of the State Normal School, on "Teaching music to children;" Miss Julia A. Stanclift, of Kalamazoo, on "Development of the perceptive faculties;" Prof. Daniel Putnam, of the Normal School, on "The kindergarten;" Prof. W. L. Smith, of East Saginaw, on "A plea for vocal music in public schools;" Supt. D. Bemis, of Coldwater, on "The outside and inside dangers of our schools;" Rev. J. S. Goodman, of East Saginaw, representing the State Board of Health, on "School hygiene;" Miss M. L. Coe, of Grand Rapids, on "Physiology in schools," and Mrs. A. J. Field, of South Haven, on "Heart and home education." C. K. Backus, of Detroit, in an address, gave "An outside view of the public schools," and Rev. D. W. Love, of East Saginaw, in an evening lecture, discussed "President Grant and our public schools." Prof. G. D. Herrick, instructor in music in the schools of Grand Rapids, illustrated, by means of a

class of children, his method of teaching vocal music. Brief addresses, upon a variety of topics, were made by Mayor Pierce, of Grand Rapids, Rev. J. Morgan Smith, and Dr. C. B. Smith, of the same city. Rev. Dr. Jocelyn, of Albion, spoke upon the question of "The Bible in schools." Prof. E. Olney, on behalf of one of the committees, reported upon some of the suggestions of the President's address, and made recommendations which were adopted by the Association. Among the resolutions adopted was one urging the necessity of increased facilities for the proper preparation of teachers for their work. Prof. W. S. Perry, of Ann Arbor, was elected president, and the executive committee was appointed, in accordance with the vote of the Association, so as to represent the various educational interests of the State.

The twenty-sixth annual meeting was held in Lansing, December 26, 27, and 28, 1876. S. D. Bingham, President of the Lansing School Board, gave an address of welcome which was responded to by the president of the Association. Dr. J. M. Gregory, Regent of the Illinois Industrial University, delivered an address on "An ideal school system for an American State." Addresses were also delivered by Dr. J. B. Angell, President of the State University, on "Our denominational colleges and the State University;" and by Superintendent of Public Instruction D. B. Briggs on "Our common schools." Rev, D. C. Jacockes, Educational Commissioner of the State at the Centennial Exposition, gave a lengthy oral report on Michigan's educational exhibit at the exposition. Prof. D. Putnam of the State Normal School read a "History of the State Teachers' Association," which had been prepared in compliance with the request of the Association. Miss Rectina Woodford of the Lansing schools, introduced a class of pupils, and gave a "Model exercise in reading." Papers were read by Prof. Austin George of Kalamazoo on "A system of promotions;" by Prof. Calvin Thomas of Grand Rapids on "Literary work for pupils of higher grades;" by Prof. J. W. Langley of Ann Arbor on "Methods of teaching natural philosophy;" by Prof. E. C. Gore of Detroit on "The utility of music;" by Prof. P. D. Horton of Marshall on "Penmanship, and how to teach it;" by Prof. I. L. Stone of Battle Creek on "Public school libraries;" and by Prof. John Goodison of Ypsilanti on "Drawing in the public schools." Prof. H. A. Ford of Kalamazoo, in behalf of a committee appointed at the previous annual meeting, presented a report on the "State educational system." The discussions of the several papers and reports were very generally participated in. Prof. C. F. R. Bellows of Ypsilanti was elected president.

The twenty-seventh annual meeting of the Association convened in East Saginaw, Wednesday, December 26, 1877, and closed the Friday following. Evening addresses were delivered by W. S. George, editor of the *Lansing Republican*, on "An outside view of the schools," and Dr. H. Q. Butterfield, President of Olivet College, on "The relations of the lower schools to the colleges." Papers were read by Prof. C. A. Gower, of Saginaw City, on "Local supervision of country schools;" by Miss Julia A. King, of Charlotte, on "Botany in its relation to graded school work;" by Prof. C. B. Thomas, of Niles, on "Educational fallacies and forces;" by Prof. D. Bemiss, of Coldwater, on "The next step in the educational progress of Michigan;" by Prof. L. McLouth, of the State Normal School, on "The experimental teaching of natural philosophy;" by Prof H. D. Harrower, of Chicago, on "A field view of the schools;" by Mrs. Kate B. Ford, of Kalamazoo, on "The kindergarten;" by Mrs. L. A. Osband, of Albion College, on "The relation of the teacher to the moral and religious culture of the future;" and by Prof. I. N. Demmon, of Michigan University, on "The use of libraries in our public

schools, and the teacher's relation thereto." Prof. W. L. Smith, teacher of music in the schools of East Saginaw and Saginaw City, illustrated, by means of several classes of children, his methods of teaching music in schools. It was decided that the annual meetings of the Association should thereafter be held at Lansing. Prof. E. Olney, of Michigan University, was chosen as president for the ensuing year.

The twenty-eighth annual meeting was held in Lansing, Dec. 25, 26, and 27, 1878. An address was delivered by Rev. John Bascom, President of the University of Wisconsin, on "Tests of a system of education." Prof. Ormond Stone, director of the Cincinnati Observatory, gave a lecture on "The Sun." Papers were read by E. O. Vaile, of Chicago, on "The spelling reform;" Miss Florence E. Cushman, of Niles, on "The needs of a higher culture in literature, and the means of securing it;" Prof. Delos Fall, of Albion College, and H. N. Chute, of Ann Arbor, on "School exhibits at our meetings;" and Professors W. H. Payne, of Adrian, and I. N. Demmon, of the University, on "Our school libraries." The last day of the session was devoted to a general discussion of "Rural and ungraded schools," participated in by State Superintendent C. A. Gower, Professors W. H. Payne, George E. Cochran, G. T. Fairchild, L. McLouth, O. Hosford, I. M. Wellington, E. A. Strong, C. B. Thomas, J. G. Plowman, Austin George, Z. Truesdel, T. W. Crissey, W. Cary Hill, and many others. The constitution of the Association was entirely revised. The attendance at each of the sessions of this meeting was very large, and the proceedings filled with interest and enthusiasm. Prof. E. A. Strong, of Grand Rapids, was elected president.

The twenty-ninth annual session opened at Lansing, December 29, 1879, and closed December 31. An address was given by Rev. Kendall Brooks, President of Kalamazoo College, on "The relations of the public schools to the moral and religious training of children." Papers were read by Prof. E. P. Church, of Greenville, on "The outlook of our common schools;" by Prof. George E. Cochran, of Kalamazoo, on "The exhibition of school material at county and other fairs as a means of promoting education;" by Prof. R. C. Kedzie, of the Agricultural College, on "The temperature of living rooms;" by Miss Ellen Dean, of Grand Rapids, on "The Harvard examination for women;" by Professors A. Hennequin, of the University, and A. Lodeman, of the Normal School, on "The teaching and study of modern languages in American schools and colleges;" by Prof. W. Cary Hill, of Battle Creek, on "Paid local committees of visitation for union and graded schools;" by Prof. W. H. Payne, of the University, on "The aspects of the teaching profession;" by Professors Austin George, of the Normal School, and W. S. Perry, of Ann Arbor, on "The classification in graded schools;" and by Prof. Z. C. Spencer, of Tecumseh, on "The literary and professional training of teachers." A committee, composed of Professors I. N. Demmon, W. H. Payne, and I. L. Stone, appointed at the preceding annual meeting to prepare lists of books suitable for school libraries, made a report which was accepted and adopted. There was an exhibition of considerable school material which was very creditable. Prof. C. B. Thomas, of Saginaw City, was elected president for the ensuing year.

The thirtieth annual meeting was held in Lansing December 28, 29, and 30, 1880. An address was delivered by Dr. Malcolm MacVicar, Principal of the State Normal School, on "The teacher and his work." An illustrated lecture on the Yellowstone National Park, entitled "An evening in Wonderland," was given by W. I. Marshall, of Fitchburg, Massachusetts. The president of the Association, Prof. C. B. Thomas, of Saginaw City, gave an address on "The

Association and the educational interests of the State." Papers were presented by Prof. C. A. Cook, of Dexter, on "The proper sphere of the village high school;" by Professors I. M. Wellington, of Detroit, and C. F. R. Bellows of the State Normal School, on "Text-books *versus* better methods in the school room;" by Miss Ruth Hoppin, of the State Normal School, and Miss M. Louise Jones of Charlotte, on "Methods in history;" by Prof. I. N. Demmon, of the University, on "The place of technical grammar in the schools of to-day;" by Professor W. J. Beal, of the Agricultultural College, on "The new botany;" by Prof. W. N. Hailmann, of Detroit, on "Primary errors;" and by Prof. H. N. French, of Kalamazoo, on "The University diploma system." A discussion on the subject, "To what extent do the strictures of Mr. Charles Francis Adams, in the November number of Harper's Monthly, apply to Michigan superintendents?" was engaged in by Professors W. H Payne, of the University, W. S. Perry, of Ann Arbor, and C. A. Sanford of Lansing. State Superintendent C. A. Gower, chairman of the committee on "Needed legislation," appointed at the last meeting of the Association, presented the following points for consideration:

1 Kind and amount of supervision desirable for the country schools.
2. What extent of territory should constitute the unit for purposes of supervision —township, county, or representative district?
3. Who shall examine teachers,—a board or an individual?
4. Who should superintend,—one man or a board?
5. Should the examining and supervising power be the same?
6. Method of selecting examiners and superintendents,—should it be by election or by appointment?
7. The township and district libraries,—what legislation is needed in their behalf?
8. Relation of the Department of Public Instruction to the State educational institutions.

The consideration of the several points presented led to an extended and general discussion which created much interest. The following resolution was eventually introduced and unanimously passed:

Resolved, That we, the members of the State Teachers' Association, have full confidence in the ability of the committee on legislation to draft a bill that will best meet with the requirements of the State, and that we will heartily endorse and sustain the measures that they judge best to bring before our State Legislature.

Prof. Austin George, of the State Normal School, was elected president for the ensuing year.

With this meeting our record of annual gatherings and exercises closes. Nearly a third of a century has passed since the first organization of the Association. Its life has been full of the ordinary vicissitudes which are incident to all voluntary societies, but in the main its days have been honorable and useful up to the present time.

III. OTHER ASSOCIATIONS.

During the continuance of the system of county superintendency of schools, from 1867 to 1875, an organization of county superintendents was maintained. The earlier meetings of this Association were held in conjunction with the State Teachers' Association. Circumstances, however, eventually separated the two bodies, and the meetings of each were thereafter held independently of the meetings of the other. This organization did much to improve the schools of the State, from the fact that greater uniformity of purpose and of modes of administration was secured, as an outgrowth of the various discussions brought before it.

During the sessions of the State Teachers' Association in 1866, an informal organization of the superintendents and principals of the larger graded schools was made, and arrangements were entered into for another meeting the next year. In 1867 a brief session of the superintendents and principals was held, and a committee appointed to provide a form of permanent organization. Whether anything further was ever done to perfect this organization we have been unable to ascertain.

In the fall of 1874 a meeting of city superintendents of schools was held in East Saginaw, and the City Superintendents' Association formed. This Association has since that time held regular meetings, and has accomplished much good. The present standard course of study for graded schools in Michigan, and the uniform methods of grading now adopted in the greater number of such schools, are outgrowths of discussions at its sessions. Superintendent I. W. Morley, of Bay City, is the president of this Association at the present time.

In the spring of 1875 an Association of special music teachers in public schools was formed in Detroit. Its second meeting was held in Grand Rapids in the following December in connection with the State Teachers' Association, and since that time its meetings have been held at the times and places of the annual sessions of that Association. Its members have usually contributed the musical part of the programme at the meetings of the State Teachers' Association, and several of them have presented papers upon the subject of "Vocal music in public schools." At its meetings various systems and methods of instruction, uniformity in courses of study, and plans for securing a greater appreciation of music as a branch of common school instruction, have been discussed.

County teachers' associations have been organized and maintained in many of the counties. These associations have usually had their origin in the teachers' institutes. Whenever properly conducted they have exerted much influence for good in the communities where their meetings have been held. Township associations have also been organized quite extensively in various portions of the State.

MISCELLANEOUS.

I. SCHOOL LIBRARIES.

The original Constitution of Michigan provided for at least one library in each township, and the revised Constitution of 1850 repeated the provision. For the support of such libraries the same laws require that all fines assessed and collected in the several counties and townships for any breach of the penal laws should be exclusively applied to the library fund. In addition to this fund the Legislature, in the earlier days of the State's existence, passed laws, affected more or less by later amendments, which provided for the levying of local taxes for the support of libraries. The early school laws established, not a township library in the strict acceptation of the term, but rather a township depository of books, which were taken in turn and in limited numbers, to the several school districts. In 1850 the law was so amended that the distribution of books to the several districts could be suspended by the township board of school inspectors, and books could be taken by individuals directly from the general collection. Under this amendment many of the libraries became really central township libraries. In 1859 the Legislature passed an act allowing the several townships to determine the question of retaining the township library as such, or of dividing it among the districts, thus making a small beginning of district libraries; and under the provisions of this act a large proportion of the townships voted to divide the books and funds among the several districts. Unfortunately no efficient provision was made for the support of these libraries, and many of them have ceased to exist, while the library funds, apportioned by the county treasurers, have been, in many cases, unlawfully applied to other purposes. There is no feature of the public school system of Michigan that offers so little encouragment for boasting as that of the school libraries. The statistics show that their growth has been feeble, and the amount of money voted by the townships, and also apportioned by the county treasurers, for library uses has been small. There are some cities and townships, however, which may be viewed as rare and exceptional cases, in which the libraries are having a healthy support principally by means of direct local taxation, and where all moneys received for them are wisely expended, and the benefits which they furnish to the fullest extent appreciated and enjoyed.

II. EDUCATIONAL PERIODICALS.

It is generally admitted that every profession, embracing any considerable number of persons, has need of a paper or periodical of some kind specially

devoted to its interests. By the aid of imagination and a little arithmetic it seems easy to provide the necessary means for the support of such a publication. Experience usually dispels all delusions in relation to this matter, and leaves behind some practical wisdom bought at its full value.

An impression has existed, derived probably from the teachings of observation and experience, that it is more difficult to find support for a paper devoted to education than for one devoted to any other specialty. For this and other reasons most of the earlier journals of education were issued by associations, or under the patronage and as the "organs" of societies, or under the patronage of the State. The prevailing belief at present is that educational papers like others may be allowed to depend upon the operation of "the law of demand and supply," and may be treated as ordinary business ventures. The public sentiment of twenty-five or thirty years ago was different. No competent man in Michigan seemed ready at that time to assume the risk of publishing a paper devoted exclusively to education without the promise and pledge of aid, in some form, from the associated teachers of the State. The promise was not always kept, nor the pledge always redeemed, but in the eyes of a hopeful faith they had a tangible value. Under these circumstances one of the most important works of the first years of its existence was the aid rendered by the State Teachers' Association in the establishment and support of the *Michigan Journal of Education.*

The *Journal* was, during most of its existence, an individual enterprise, yet its establishment at the time and its support during its infancy were undoubtedly due to the existence of the Teachers' Association and to the encouragement which its action gave to the editors and proprietors. The project of publishing an educational paper of some sort was not a new one in the State. The first State Superintendent had issued such a periodical for a time. Some other faint efforts had been made in the same direction. In 1842 the Superintendent of Public Instruction, Franklin Sawyer, Jr., in his report "referred to the necessity of some publication as an organ of communication between the numerous school districts and his office," and "recommended that a definite amount of the school moneys should be appropriated to secure its establishment." He entered into a somewhat detailed statement of the uses and advantages of such an organ, but his recommendations and arguments failed to influence the Legislature. No appropriation was obtained, and no paper was published.

At the semi-annual meeting of the State Teachers' Association at Kalamazoo, in September, 1853, the project of an educational journal was presented and very thoroughly and earnestly discussed. The subject was brought before the body by the reading of a paper by Dr. J. M. Gregory, then of Detroit. This paper had been prepared by him in consequence of a consultation between himself, Dr. E. O. Haven, then of the State University, and Prof. A. S. Welch, at that time Principal of the State Normal School. The Association resolved, after careful consideration, that the time had come to commence the publication of an educational monthly. Professors Haven, Welch and Gregory were elected editors, with two ladies who never accepted the appointment, and the first number of the *Michigan Journal of Education* was issued January 1, 1854. This board of editors continued in charge for only one year. In 1855 Mr. Gregory assumed sole editorial charge, and retained the position for four years, retiring then to assume the duties of State Superintendent of Public Instruction. The work of editing and publishing the *Journal*, on the part of Dr. Gregory, was largely a labor of love. The direct pecuniary assistance rendered by the Association was inconsiderable; but its moral support and the concerted action of

its members often proved to be of great value, as the records of the Society and the pages of the magazine abundantly show. At the meeting in Kalamazoo, upwards of three hundred subscriptions were pledged for the forthcoming first number. In every subsequent meeting for several years, more or less time and attention were given to its character and interests, and pledges of substantial aid were made, some of which were honorably redeemed. Reports, resolutions, and discussions were frequent, and sometimes, at least, to the advantage of the periodical and the encouragement of the publisher.

In August, 1854, at the meeting in Marshall, Dr. Haven, Dr. Stone, and Prof. Welch were appointed a committee to memorialize the Legislature to secure the passage of an act to place a copy of the *Journal* in every school library in the State. A memorial was prepared and presented at the session of the Legislature in January of the following year. The result was the enactment of a law authorizing the Superintendent of Public Instruction to subscribe for two copies of the *Journal* for each township school library in the State, such subscription to continue through two years. The subscription was immediately made to commence with the January number of 1855. Of this measure the editor says, in the February issue, "It has placed our enterprise on a footing that will enable us to devise yet more liberal things for the educational interests of the State." The paper was enlarged, in the following May, from thirty-two to forty-eight pages, and it entered upon a period of greater efficiency and usefulness.

Just before the expiration of the two years for which the state subscription had been made, the Association instructed its executive committee to ask of the Legislature a continuance of the state patronage. The passage of an act was secured by which a copy of the *Journal* was sent to each school district in the State. The number of districts at that time was about thirty-eight hundred. The circulation of the paper was in this way largely increased, and its influence much more widely extended, although the pecuniary advantage to the publisher was only trifling, from the fact that the State paid but sixty cents a copy. Unfortunately, also, the continuance of this aid from the public funds depended upon the good will of the Superintendent of Public Instruction, and at the close of the year 1857 the state subscription was withdrawn. Some sharp discussions followed in the columns of the *Journal*, in the meetings of the Association and elsewhere, as a few of the older members of that body will recollect, but the remembrance of them lies buried beneath the accumulated dust of years, and their discordant notes need never disturb the ears of the present generation of Michigan teachers. Having been elected to the office of Superintendent of Public Instruction, Mr. Gregory retired from the editorial chair of the magazine at the close of the year 1858, upon the completion of the fifth volume.

At the session in August, 1858, the Association, after protracted discussion and the consideration of various propositions, passed these resolutions:

1. That the Executive Board be, and are hereby instructed to execute, with some responsible publishing house, a contract for the publication of the *Journal of Education* for one year from the first of January, 1859; *Provided*, That such publishing house agree to assume all the pecuniary risks of the publication of the *Journal*; *Provided, also*, That the Association be permitted to retain the editorial management and control of the *Journal*.

2. That in case the above arrangement cannot be effected, the Executive Board are requested to make such provision as they may deem best for the maintenance of the *Journal* till the next meeting of the Association.

It having been found impracticable to carry out the instructions of the first

resolution, the Executive Board made an arrangement with Prof. A. Winchell, then of the University, to act as editor and publisher for the year 1859.

The new Superintendent of Public Instruction renewed the state subscription, commencing with March of the same year, and continued it until the repeal of the law authorizing the sending of the *Journal* to the school districts of the State. The subscription closed with the May number of 1861.

The *Journal* was edited during the year 1860 by a board of twelve editors, each editor preparing the matter for one month, and the publication was provided for by the Executive Committee of the Association.

At the beginning of 1861 the work of editing and publishing the paper was assumed, at the request of the Committee, by Duane Doty, of Detroit. Various causes conspired, however, to render the existence of the *Journal* precarious, and it finally expired with the October or November number of the eighth year of its publication.

With the decease of the *Journal of Education*, the State Association ceased to have any official connection with the publication of an educational paper, and its "good will" even, since that event, has probably been of no especial value to any periodical. It can hardly be doubted, however, by one familiar with the educational history of Michigan during the last thirty years, that the establishment and support of the *Journal*, in the period of its greatest efficiency and usefulness, were largely due to the material and moral aid afforded by the Association as a body, and especially by a few of its most active and enthusiastic members. On the other hand, it is equally obvious that the *Journal*, particularly while under the editorial charge of Mr. Gregory, rendered very great and important service to the Association. The Society "had invoked the aid of the press, and through its organ it speedily rose from a mere local organization to be known and honored throughout the entire State."

For four years we had no educational paper. Periodical discussions took place, and projects were set on foot now and then, but nothing came of them until January, 1866. At that date the publication of the *Michigan Teacher* was commenced by Professors W. H. Payne and C. L. Whitney, at Niles. In the second year of its existence it was removed to Ypsilanti, and Prof. John Goodison became associated with the gentlemen previously named in its management and publication. In 1870 it was removed to Adrian, continuing under the editorial charge of Prof. Payne, assisted by C. L. Whitney, H. L. Wayland, and Henry A. Ford. With the opening of the year 1871, the *Teacher* returned to its birth-place, Niles, and came under the exclusive control of Mr. Ford as editor and publisher. With one more change of residence, to Kalamazoo in July, 1875, it continued under the charge of Mr. Ford until the close of the year 1876, when it disappeared by absorption into the *Educational Weekly* just commencing its existence in the city of Chicago.

Eleven volumes of the *Teacher* were published, and its life, though migratory, was, for the most part, highly useful and honorable. Its demise was regretted by many sincere friends among the teachers of Michigan and other states.

In January, 1872, an educational monthly, called *The School*, was started by some of the professors connected with the State Normal School at Ypsilanti, and was continued up to the close of 1876, when it also was merged into the *Educational Weekly*.

Since 1876 there has been no educational periodical published expressly for the teachers of Michigan until the present year, when the *Michigan School Moderator*, a weekly paper issued by parties in the city of Grand Rapids, was